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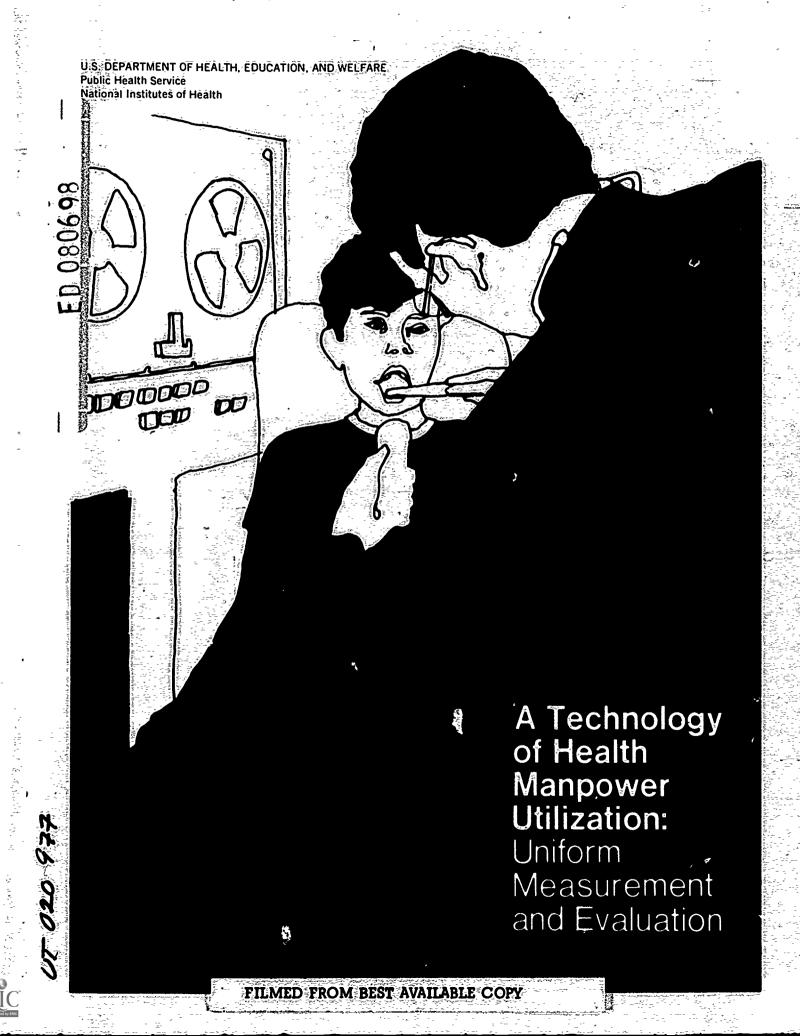
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Index Terms

ABSTRACT

This annotated bibliography documenting the range of recent studies of manpower utilization is intended to stimulate qualified investigators to regin a systematic, technologically sound ordering of human manpower and skills in the health field. To correct the existing inefficient distribution of manpower in the health industry, more appropriate distribution of tasks among health workers is needed. The research resumes are arranged by accession number and include document titles, index terms, and abstracts. Indexes of subject terms and personal and organizational authors are supplied and details on how to order the National Technical Information Service documents are given. (Editor/SN)



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# INTRODUCTION

The health industry is moving into its "industrial revolution" at a time when its business and industrial counterpart is entering the "post-industrial era." Health care is plagued by inefficient utilization of the skills in its work force and by problems of geographic and specialty maldistribution of its workers. Nor will simplistic "more of the same" training solutions substantially alter this state of affairs. Clearly, the orderly application of a technology of training and utilization is required if we are to achieve national goals of access to adequate health care at a reasonable cost for all our citizens.

The general problems of utilization and maldistribution have been studied many times during the past decade. A conclusion of nearly all such studies is that more appropriate distribution of tasks among health workers is feasible and necessary. And, in spite of a large number of so-called "task analysis" studies, there is little agreement regarding pertinent methods, variables, conventions or analytic techniques. Imagine the confusion if physical scientists were to use measurement devices of their own unique design and scale, precluding effective communication.

This annotated bibliography documents the range of recent studies of manpower utilization. Results of individual studies will be of interest to some readers; methods employed will be useful to others. But the greatest potential use of this document will be as a stimulus to qualified investigators to begin the process of specifying a set of definitions and conventions through which an orderly technology of manpower utilization will be developed.

Neil S. Dumas, Ph.D. Chief, Manpower Studies Staff Office of Special Programs Bureau of Health Manpower Education



<sup>1/</sup> Report of the National Advisory Commission on Health Manpower, Vol. 1, No. 1967, GPO, Washington, D.C.

# HOW TO ORDER NTIS REPORTS

Documents listed in this bibliography can be purchased either in paper copy or microfiche from the National Technical Information Service (NTIS), 5285 Port Royal Road, Springfield, Virginia 22151.

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When ordering documents, determine the cost based on page count and enclose a check or money order for that amount payable to NTIS. NTIS will ship your document and return any overpayment, or bill you for the amount of an underpayment if you have a domestic address.

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# **HEALTH MANPOWER UTILIZATION**

AD-445 869
Applied Science Associates, Inc., Valencia, Pa.
DEVELOPMENT OF AN IMPROVED METHOD
OF TASK ANALYSIS AND BEGINNINGS OF A
THEORY OF TRAINING.
Technical rept.,
John D. Folley, Jr. 22 Jun 64, 44p
NAVTRADEVCEN-1218-1
Contract N61339-1218
See also AD-445 870.

Descriptors: (\*Job analysis, Theory), (\*Training, Job analysis), Performance (Human), Probability, Decision making, Specifications.

The problem was to devise an effective method of task analysis that would fit in with a larger program of training device development. Four major results were obtained: (1) A set of Guidelines for Task Analysis. These Guidelines include: (a) Background material thought to be useful to the task analysis (e.g. The Nature of Task Analysis and The Nature of the Task Analysis (b) An overview of the process of task analysis (c) Samples of forms to be used in task analysis (c) Samples of forms to be used in task analysis (c) Samples of completed portions of a task analysis (2) A system of interrelated definitions, constructs, and hypotheses, relating task attributes to training requirements (3). Recommendations for further research to improve Task Analysis and Training Situation Analysis.

AD-445 970
Applied Science Associates, Înc., Valencia, Pa. GUIDELINES FOR TASK ANALYSIS.
Technical rept.,
John D. Folley, Jr. 22 Jun 64, 40p
NAVTRADEVCEN-1218-2
Contract N61339-1218
See also AD-445 869.

Descriptors: (\*Job analysis, Theory), (\*Training, Job analysis), Decision making, Determination, Time studies.

The guidelines are to help the TSA team in accomplishing the task analysis part of the Training Situation Analysis (TSA) specified in the basic instructions for TSA, and supplemented in the memorandum. TSA Guidelines' dated 6 April 1962. The first section of the Guidelines presents some basic ideas that the analyst should understand before getting into the instructions for task analysis. The following sections present the stages of the task analysis method essentially in the order in which they would normally be performed. Examples are given to illustrate the type of data required, and discussions of special problems or techniques are included where they clarify the instructions. (Author)

AD-445 871
Applied Science Associates, Inc., Valencia, Pa.
A REVIEW OF THE LITERATURE OF TASK
ANALYSIS METHODS,
Andrew P. Chenzoff. 22 Jun 64, 31p
NAVTRADEVCEN-1218-3
Contract N61339-1218

Descriptors: (\*Job analysis, Theory). (\*Training, Job analysis), Reviews, Reliability, Specifications. Identifiers: Task analysis.

This review revealed that, in studies of task analysis methods, very few workers have tried to determine which items of task information are actually relevant to training equipment decisions, still fewer workers have attempted in develop a method by which the relevant information can be assessed, analyzed, and combined in such a way that the best decisions about training devices might be made. Two basic approaches to task analysis for deriving training and training device recommendations are described. (Author)

AD-448 363
Human Resources Research Office, George Washington Univ., Alexandria, Va.
AN ANNOTATED BIBLIOGRAPHY ON THE DETERMINATION OF TRAINING OBJECTIVES.
Research memo.

Robert G. Smith Jr. Jun 64, 44p

Descriptors: (\*Bibliographies, Job analysis), (\*Job analysis, Training), Quality control, Achievement tests, Learning, Automátion, Systems Engineering, Technicians, Human engineering, Army personnel, Air Force personnel, Navy, Maintenance personnel, Behavior.

This bibliography was prepared to provide a basis for a practical manual on the determination of training objectives. References have been listed alphabetically by author within seven categories: I. GENERAL RATIONALES-General papers on training and the problem of determining training objectives: II. SYSTEM ANALYSIS-Report concerned with general aspects of system analysis and human factors in system analysis. III. JOB ANALYSIS-Reports concerned with identifying the tasks included in a job. IV. ALLOCATION OF TRAINING-Reports dealing with rationales for determining whether a task should be taught. V. TASK DESCRIPTION-Methods for describing tasks in detail. VI. DETERMINATION OF KNOWLEDGES AND SKILLS-Reports dealing with the analysis of tasks to determine the component knowledges and skills involved in the task. VII. DESCRIPTION OF OBJECTIVES-Reports describing of illustrating how objectives should be described or specified (Author)

AD-462 334
Johns Hopkins Univ., Silver Spring, Md. Applied Physics Lab.
PERSONNEL INVENTORY (A REPORT ON AN AUTOMATED INDEX TO MANPOWER).
Technical memo.,
Robert A. Dickmann. Jan 65, 29p TG-647
Contract NOw-62-0604-c

Descriptors: (\*Labor, Indexes), (\*Personnel, Inventory). Automation, Data processing systems, Personnel management, Job analysis.

The purpose and problems of an automated index to manpower are presented, and four criteria for the elimination of these problems are listed. An explanation of ALGONE, APL's personnel inventory program, is given outlining in some detail the application of ALGONE to the search, print, and edit functions of APL's Information Storage Package. Finally, ALGONE's present value and future potentialities are given. (Author)

AD-472 155
Applied Science Associates, Inc., Valencia, Pa.
GUIDELINES FOR TRAINING SITUATION
ANALYSIS (T5A).
Final rept.,
Andrew P. Chenzoff, and John D. Folley, Jr. Jul
65, 213p NAVTRADEVCEN-1218-4
Contract N61339-1218

Descriptors: (\*Training devices, \*Handbooks), Management planning, Naval training, Training, Job analysis, Test methods, Performance (Human), Effectiveness, Decision making, Systems engineering, Personnel management, Costs, Manmachine systems.

These guidelines represent a textbook for instruction in three phases of Training Situation Analysis (TSA), a standardized procedure, developed by NTDC, for systematically gathering and interpreting the information which is relevant to the planning of training and training devices. Three phases of TSA are described in detail: System Familiarization, Task Analysis Method (TAM) and Training Analysis Procedure (TAP). System

Familiarization provides an orientation to the training problem, the system structure and flow, and the equipment. Task Analysis Method produces a set of task descriptions containing the information necessary for making training device decisions. Training Analysis Procedure produces a ranking of tasks based upon the potential benefit to system performance as a result of training and the cost of that training. Recommendations for the conduct of these three phases and suggested working forms are presented. (Author)

AD-474 018
Massachusetts Inst. of Tech., Cambridge:
A\_HEURISTIC APPROACH TO ALTERNATE
ROUTING IN A JOB SHOP.
Bachelor's thesis and Master's thesis,
Francis John Russo. Jun 65, 52p MAC-TR-19
Contract Nonr-4102 (01)

Descriptors: (\*Scheduling. \*Job analysis), Management engineering, Simulation, Digital computers, Queueing theory. Identifiers: Theses:

The research reported investigates the use of heuristics for selecting from several alternate routes, resulting from partially-ordered tasks in a job-shop order file. The experimental vehicle employed was digital simulation on the Project MAC Compatible Time-Sharing System. The methodology was to conduct two passes of simulated shop runs. The first, with two artificially high levels of alternate incidence, tested the efficiency of five different alternate routing heuristics in reducing mean tardiness. The second pass consisted of runs with the best heuristic developed during the first experimental phase, applied to a realistic length and frequency of alternate strings. The performance characteristics of the different heuristics are discussed at length. In addition, some implications are drawn of the computational nature of alternate routing and the difficulties encountered in implementing alternate routing heuristics at operation time. (Author)

Naval Personnel Program Support Activity. Washington, D. C. Personnel Research Lab.
JOB EVALUATION: A PRELIMINARY ANALYSIS OF ITS APPLICATION TO NAVY ENLISTED BILLETS,
Alexander J. Rose, and Francis L. McTavish. Jan
66, 68p WRM-66-27

Descriptors: (\*Job analysis, \*Naval personnel), Marine corps, Personnel management, Manpower studies, Research program administration, Feasibility studies.

A discussion is presented of some of the problems that may be encountered in the course of developing a billet evaluation system for Navy enlisted billets. Included is an assessment of the Marine Corps billet evaluation system. Job evaluation in the modern Navy is a complex problem. Advancements in technology, as well as in strategic and tactical planning, have given rise to problems of such magnitude in personnel administration as to require management tools capable of coping with the vast number and diversity of skills employed in today's Navy.

AD-601 816
Harpur Coll Endicott N Y
TEAMWORK UNDER TURNOVER, AND SUCCESSION.
Technical rept no. 2
Donald B. Trow.Jun 64 2p
Contract Nonr3679 00

Descriptors: (\*GROUP DYNAMICS, PER-FORMANCE (HUMAN)), (\*JOB ANALYSIS, GROUP DYNAMICS), ADJUSTMENT (PSYCHOLOGY), LEADERSHIP, SOCIOMET-RICS, SOCIAL PSYCHOLOGY, INTEL-



LIGENCE TESTS, INTERCOMMUNICATION SYSTEMS, TYPEWRITERS.

Twenty-eight groups were observed performing a task that requires teamwork but allows flexibility of organization. The teams were made to experience varied amounts of membership replacement. Team performance was found to suffer significantly: (a) if the number of members replaced was large relative to the past history of the team; (b) if succession in the control position was involved; and (c) if the successor's intelligence was lower than his predecessor's. Performance did not suffer if (a) the number of members replaced was large absolutely but not relatively or (b) replacement occurred as turnover in-subordinate positions; further, (c) performance was unrelated to intelligence except following replacement. The findings are not flask-specific, as they in general replicate those of previous studies employing different tasks. (Author)

AD-602 041
Bio-Dynamics Inc Cambridge Mass
DESIGN AND USE OF INFORMATION
SYSTEMS FOR AUTOMATED ON-THE-JOB
TRAINING. I. CONCEPTUAL AND EXPERIMENTAL APPROACHES.
Thomas B. Sheridan and Sylvia R. Mayer.Dec 63
26 ESD-TDR64 234
Contract AF19 628 455

Descriptors: (\*COMMAND AND CONTROL SYSTEMS, TRAINING DEVICES), (\*TRAINING DEVICES), (\*TRAINING DEVICES), BEHAVIOR, DECISION MAKING, TRAINING, LEARNING, EDUCATION, DISPLAY SYSTEMS, COMPUTERS, MODELS (SIMULATIONS), LANGUAGE, GAME THEORY, JOB ANALYSIS, AUTOMATION, DESIGN.
Identifiers: SAGE.

The report describes exploratory developments on laboratory models of automated training subsystems for information systems. Such subsystems could provide future information systems with the capability to train their users on the job. The report outlines on-going studies concerned with (1) the unique training requirements in advanced information systems; (2) new training concepts and techniques to meet these requirements; and (3) an analytic tool to describe functional and structural overlap of equipment required for both operations and training. (Author)

AD-602 392
Applied Psychological Services Wayne P
THE DEVELOPMENT AND APPLICATION OF
ABSOLUTE SCALES OF ELECTRONIC JOB
PERFORMANCE.
Arthur I. Siegel, Douglas G. Schultz and Richard
S. Lanterman: Jun 64 2p
Contract Nonr4153 00

Descriptors: (\*PÉRFORMANCE TESTS, ELECTRONIC TECHNICIANS). (\*JOB ANALYSIS, PSYCHOMETRICS). (\*PSYCHOMETRICS, MILITARY REQUIREMENTS), APPLIED PSYCHOLOGY, SCALE, AVIATION PERSONNEL, NAVAL PERSONNEL, PERFORMANCE (HUMAN).

The development and logic of a technique for evaluating the performance level of naval avionics technicians without reference to normative materials is described. The technique, which relates the performance level of the technician, as derived from a Guttman scale, to a series of fleet objectives, was found to be reliable and usable. The results of its application to a sample of naval avionics technicians are described. (Author)

AD-603 164
Institute of Engineering Research Univ of California Berkeley

SUPERVISORY JOB DESIGN, Louis E. Davis, Ernst S. Valfer and Kenneth Pool...May 64 2p Rept. no. 64 5 HFT 64 10T Contract Nonr3656 04

Descriptors: (\*JOB ANALYSIS, LEADER-SHIP). (\*SUPERVISION, -INDUSTRIAL PRODUCTION), (\*SUPERVISORY PERSONNEL, JOB ANALYSIS), ATTITUDES, GROUP DYNAMICS, MOTIVATION, PERCEPTION (PSYCHOLOGY), DECISION MAKING.

Two job-design treatments changing the duties. responsibilities, and authority of first-line supervisors and, by delegation, of workers were in-troduced in an industrial plant. In the first state, each supervisor was responsible for only a seg-ment of all product completion tasks. In the second state, the supervisor was made responsible for all production functions but not product ac-ceptance; authority for the latter was added in the third state. These job changes were designed to test the following primary hypothesis: Higher economic productivity (lower total cost) and greater need satisfaction for the members of a work group, including the supervisor, will result from specifying the job content of the supervisor in the direction of increasing his authority and responsibility by including supervision over all the functions required to complete the product or service assigned to his work group. A general response mechanism model proposed that causal variables sensitive to the organization will effect end-result variables with time slippage through mediating sequential changes in perceptions, attitudes, and motivations by the job holder towards job and organization, resulting in changes in behavior towards others and the task. (Author)

AD-604 551-Occupational Research Center Purdue Univ Lafayette Ind FACTOR ANALYSES OF WORKER-ORIENTED JOB VARIABLES. Rept. no. 4.

Rept. no. 4,
Joseph William Cunningham and Ernest J.
McCormick.Jun 642p
Contract Nonr110019

Descriptors: (\*JOB ANALYSIS, INDUSTRIAL PSYCHOLOGY), (\*PERSONNEL, INDUSTRIAL PSYCHOLOGY), (\*PACTOR ANALYSIS, MANPOWER STUDIES), PERSONNEL MANAGEMENT. STATISTICAL ANALYSIS, CORRELATION TECHNIQUES, BEHAVIOR. PERFORMANCE (HUMAN). -CLASSIFICATION, PSYCHOMETRICS, LABOR. Identifiers: WORKER-ACTIVITY PROFILE.

The present report concerns a further investigation of the dimensions of worker-oriented job variables through use of the Worker Activity Profile (WAP). In this study, factor analyses similar to Gordon and McCormick's were conducted, using a-job sample hased on percentages of people within various occupational areas. The resulting factors were then compared with Gordon and Mc-Cormick's by use of the coefficient of congruence The results of six separate factor analyses of WAP item groups were judged to be generally meaningful. Of the 32 factors obtained in this study, 16 were classified as comparable to factors from Gordon and McCormick's study, two others appeared from inspection to be similar to two of their fac-tors, and eight factors showed a noticeable relationship with factors obtained by Gordon and Mc-Cormick, It was concluded that there are fairly sta-ble and meaningful dimensions of jobs that characterize work in worker-oriented terms. These dimensions are sufficiently structures so that they emerge through factor analysis despite differences in the choice of bases for job samples used. (Author)

AD-604 552 Occupátional Research Center Purdue Univ Lafayette Ind THE DEVELOPMENT, ANALYSIS, AND EX-PERIMENTAL APPLICATION OF WORKER--ORIENTED JOB VARIABLES. Rept. no. 8 (Final). Ernest J. McCormick. Jul 64 2p Contract Nonr 1100 19

Descriptors: (\*JOB ANALYSIS, INDUSTRIAL PSYCHOLOGY), (\*FACTOR ANALYSIS, MANPOWER STUDIES), (\*PERSONNEL, INDUSTRIAL PSYCHOLOGY), PERSONNEL MANAGEMENT, BEHAVIOR, CLASSIFICATION, PERFORMANCE (HUMAN), CORRELATION TECHNIQUES, PSYCHOMETRICS, LABOR. Identifiers: WORKER ACTIVITY PROFILE.

This report summarizes a series of exploratory studies relating to worker-oriented job variables. These variables include worker behaviors in jobs and certain job context variables (situational and environmental) that have relevance to human work, as contrasted with job-oriented variables that deal more with the technological aspects of jobs. It is postulated that human work can be characterized in terms of either type of variable. However, for purposes of, establishing common denominators across jobs of varied technological types, one must describe jobs more in terms of human behaviors and related variables (what are referred to here as worker-oriented variables).

AD-604 553
Occupational Research Center Purdue Univ Lafayette IndTHE EXPERIMENTAL USE OF WORKERORIENTED JOB VARIABLES IN DETERMINING JOB REQUIREMENTS.
Rept. no. 5,
Joseph William Cunningham and Ernest J.
McCormick. Jul 64 2p.
Contract Non'i 100 19

Descriptors: (\*FACTOR ANALYSIS, MAN-POWER STUDIES), (\*PERSONNEL, INDUSTRIAL PSYCHOLOGY), (\*JOB ANALYSIS, INDUSTRIAL PSYCHOLOGY), BEHAVIOR, LABOR, PERFORMANCE (HUMAN), PSYCHOMETRICS, PERSONNEL MANAGEMENT, APTITUDE TESTS, PERSONALITY, MOTOR REACTIONS, CORRELATION TECHNIQUES. Identifiers: WORKER ACTIVITY PROFILE, PERSONNEL, SCREENING TESTS.

This study was carried out in order to explore the possibility of the establishment of job requirements. The procedures followed in this study in volved the development, for each job. of attribute scores for various human attributes. These were derived as follows: (1) Identification of attributes to be used (42 were selected for this purpose). (2) Rating of each activity of the Worker Activity Profile in terms of the degree to which each such attribute would be required. (3) Derivation of an attribute weight for each attribute on each item of the Worker Activity Profile (a single value for each attribute was derived from the several corresponding ratings). (4) Analysis of each job (in a sample of jobs) using the Worker Activity Profile. (5) Computation, for each job, of an attribute score for each attribute (this score was based on the attribute weights for the various items of the Worker Activity Profile as multiplied by the item value for the job, with these cross-product values summed across all items that were analyzed as being applicable to the job). (Author)

AD-604 554
Occupational Research Center Purdue Univ Lafayette Ind
THE EXPERIMENTAL USE OF DIMENSIONS
OF WORKER-ORIENTED JOB VARIABLES IN
DETERMINING JOB REQUIREMENTS.
Rept. no. 6,
George C. Thornton and Ernest J. McCormick, Jul
64 2p
Contract Nonr1100 19

Descriptors: (\*FACTOR ANALYSIS, MAN-POWER STUDIES), (\*JOB ANALYSIS, IN-DUSTRIAL PSYCHOLOGY), (\*PERSONNEL, INDUSTRIAL PSYCHOLOGY), NAVAL PER-INDUSTRIAL PSYCHOLOGY), NAVAL PERSONNEL, APITIUDE TESTS, MOTOR REACTIONS, CORRELATION TECHNIQUES, PERFORMANCE (HUMAN), BEHAVIOR, PSYCHOMETF, CS, LABOR, Identifiers: WORKER ACTIVITY PROFILE, PERSONNEL SCREENING TESTS.

Three different procedures were used for deriving Three different procedures were used for deriving statisbute indices' for job factors, these attribute indices being derived for 14 different aptitudes, motor abilities, and physical capacities. These attribute indices, in turn, were used experimentally in two phases of the study. In one phase they were correlated with worker trait requirements of 40; jobs as published by the U.S. Employment Service. These published job requirements were given for the capacitations. for the same attributes. The correlations were all significant, and of essentially the same magnitude, as those obtained in the previous study (in which as those obtained in the previous study (in which the 192 items were treated individually). In the second phase, the indices of four attributes were derived for 43 Naval ratings (jobs). These, in turn, were correlated with test validity coefficients from were correlated with test validity coefficients from 125 test validation studies with these 43 Naval ratings. This analysis resulted in significant relationships for most of the tests and subtests. The results of this analysis were generally more positive than a corresponding type of analysis in the previous study of 140 varied industrial jobs for which sublished wildlift days to the control of the control o which published validity data were available. In general, the results of this study lend encouragement to the possibility of being able to establish job requirements through what are essentially job analysis procedures. (Author)

#### AD-666 004

American Inst for Research Pittsburgh P
A SUGGESTED GUIDE TO POSITION STRUC-TURE, Robert B. Miller. May 56 AFPTRC-TM5613 Contract AF18 600 1203

Descriptors (\*JOB ANALYSIS, AIR FORCE PERSONNEL), (\*AIR FORCE PERSONNEL, JOB ANALYSIS), AIR FORCE TRAINING, FERFORMANCE (HUMAN), PERSONNEL MANAGEMENT, TRAINING DEVICES, DECISION MAKING, MONITORS, SCANNING, JOB ANALYSIS, MAINTENANCE, TIME STUDIES, TEST METHODS, HUMAN ENGINEERING, MANPOWER STUDIES.

A position is defined as the total set of tasks which might reasonably be performed, on the average, by a single individual during a period of maximum efa single individual during a period of maximum er-fort such as may occur in simulated or actual com-bat missions. Position structure is the assigning of all tasks and groups of tasks within an organiza-tional unit to individual positions on the basis of (a) requirements of the organizational unit to accomplish a goal, and (b) the psychological factors going into individual training and performance. The product of this structuring is a position or-ganization table which will provide the data the Air Force may use in establishing official tables of or-ganizations and manning tables. The development of position structures must reconcile solutions to two divergent problems. One of these problems is finding the most efficient and least vulnerable pattern of manpower capability from the standpoint of unit operation. This is an operational problem. The second problem is the related question of the best allocation of duties and tasks to an individual in terms of selection and training economy. This is the psychological problem. A sound table of organization and manning table will be an optimum solution to both the operational and psychological

AD-606 010 American Inst for Research Pittsburgh P A SUGGESTED GUIDE TO POSITION-TASK Robert B. Miller. Apr 56 2p ASPRL-TM56 6

Contract AF18 600 1203

Descriptors: (\*JOB ANALYSIS, WEAPON SYSTEMS). (\*AIR FORCE PERSONNEL, JOB ANALYSIS), (\*WEAPON SYSTEMS, JOB ANALYSIS), AIR FORCE TRAINING, TRAIN-ING DEVICES, HUMAN ENGINEERING, MAINTENANCE, TEST METHODS, PER-MAINTENANCE, TEST METHODS, PER-FORMANCE (HUMAN), MONITORS, MILI-TARY REQUIREMENTS, PERSONNEL TARY REQUIREMENTS, PERSONNEL MANAGEMENT, TIME STUDIES, DECISION MAKING, CONTROL SYSTEMS, SYSTEMS ENGINEERING, MANPOWER STUDIES. Identifiers: MAN-MACHINE SYSTEMS.

The primary purpose of this guide is to expound methods which may be used for describing job requirements for operation and maintenance of new Air Force weapon systems. The procedures and format suggested in this guide for preparing position-task descriptions are not the only ones which may serve adequately for anticipating the personnel and training requirements generated by new Air Force weapon systems. The procedures described are based, however, upon previous stu-dies in which job information was developed and recorded for the operation and maintenance of certain complex systems. These procedures, therefore, have been tested on a trial basis through application to selected equipment systems. Position task description represents a means of systematically developing information which is required at one time or another in the multitude of personnel and training actions which must be planned and accomplished before a new weapon system is introduced into the field. It is recognized that for specific purposes less detailed job infor-mation may be required than is described in this guide. It is expected that this guide will be helpful in indicating even for these more restricted purposes how the required information might be assembled and recorded.

Dunlap and Associates Inc Santa Monica Calif
TECHNIQUES FOR RELATING PERSONNEL
PERFORMANCE TO SYSTEM EFFECTIVENESS CRITERIA: A : CRITICAL REVIEW OF THE LITERATURE, A. J. Hoisman. 2p Contract Nonr431400

A portion of the original document contains fine detail which may make reading of photocopy dif-

(\*SYSTEMS ENGINEERING. Descriptors: PERFORMANCE (HUMAN), (\*PER-FORMANCE (\*HUMAN), SYSTEMS EN-GINEERING), HUMAN- ENGINEERING, STANDARDS, EFFECTIVENESS, PERSON-NEL. MODELS (SIMULATIONS), WEAPON SYSTEMS.

AD-006-915
Rand Corp Santa Monica Calif
PRICE-QUANTITY ADJUSTMENTS IN MULTIPLE MARKETS WITH RISING DEMANDS,
Kenneth J. Arrow, 7 May 58 2p Rept. no. p-1364-

This paper is part of an economic analysis of the engineer-scientist market conducted for RAND Corp. in collaboration with A. Alchian and W. Capron. Legibility of this document is in part unsatisfactory. Reproduction has been made from best available copy.

Descriptors: (\*ECONOMICS. STUDIES). (\*MANPOWEI MANPOWER Descriptors: (\*ECONOMICS. MANPOWER STUDIES). (\*MANPOWER STUDIES. PROFESSIONAL PERSONNEL), (\*PROFES-SIONAL PERSONNEL, MANPOWER STU-DIES), SCIENTIFIC PERSONNEL, EN-GINEERING PERSONNEL. ABUNDANCE. DISTRIBUTION (ECONOMICS). MATHE-MATICAL ANALYSIS

An economic analysis of the engineer - scientist

AD-600 428 Rand Corp Santa Monica Calif FRINGE BENEFIT EVALUATION THROUGH THE PROFILE-RANKING METHOD. Joseph C. FeldmeierJr. and William A.Groenekamp.Dec 64 2p Rept. no. p-3028
Rept. prepared for publication in Personnel, 1965. Jan - Feb. .

Descriptors: (\*PERSONNEL MANAGEMENT, Descriptors: ('PERSONNEL MANAGEMENT, STATISTICAL ANALYSIS), ('STATISTICAL ANALYSIS, PERSONNEL MANAGEMENT), MANAGEMENT CONTROL SYSTEMS, MANAGEMENT PLAINNING, EMPLOYEE RELATIONS, INDUSTRIAL RELATIONS, MANPOWER STUDIES, BARGAINING. Identifiers: EMPLOYEE FRINGE BENEFITS.

A profile-ranking technique is developed that com-pares' the contents and coverage of benefit programs, presented by various companies, in terms of their desirability to employees. A list of basic elements included in a benefit program is con-structed and these elements are ranked by company representatives in order of importance to themselves and to their employees. An over-all, ideal fringe benefit profile can be itemized for the companies surveyed, giving management a clear, concise evaluation of the relative position of its fringe benefit program.

AD-610 129 -Operations Research Inc Silver Spring M OPERATION SECRETARIAN SHAPE SPING NATURE OF THE BUREAU OF NAVAL PERSONNEL NEW DEVELOPMENTS PERSONNEL PLANNING INFORMATION DOCUMENTATION PROCEDURES AND FORMATS, V. Owen Wayman and Daniel B. Jones. Nov 64 2p Rept. no. TR-285 ND-65-10 Contract Nonr394900

Descriptors: (\*NAVAL PERSONNEL, MAN-POWER STUDIES), (\*MANPOWER STUDIES, DOCUMENTATION), (\*PERSONNEL MANAGEMENT, NAVAL PERSONNEL), (\*JOB ANALYSIS. WEAPON SYSTEMS), NAVAL TRAINING, SYSTEMS ENGINEERING, HUMAN ENGINEERING, MAINTENANCE, MAINTENANCE PERSONNEL, MILITARY REQUIREMENTS MILITARY REQUIREMENTS. PROCESSING SYSTEMS. Identifiers: SEA HAWK, PE PLANNING INFORMATION. PERSONNEL MACHINE SYSTEMS.

Bureau of Naval Personnel New Developments Personnel Planning Information Documentation Procedures and Formats are presented. The report is specifically designed to assist New Developmen's analysts and contractors in documenting Personnel Planning Information (PPI) as required for the Bureau of Naval Personnel Personnel Research Reports. These exhaustive Personnel Research Reports provide the basic data source for planned requirements inputs to the CAPRI manpower manager 1 't system, the preparation of inputs to Technical evelopment Plans (TDP's). Training Plan Conterences (TPC's), and other research studies, and comprise a record of personnel research conducted on new Naval weapon and support systems. This report presents detailed procedures for development of the PPI data, specific examples of formatted information, and an outline of how the PPI data are structured in the Personnel Research Report. Subsequent Bureau of Naval Personnel Operating Instructions will provide specific guidance for utilizing the PPI data to meet TDP. TPC, etc., requirements.

AD-612 803

Army Missile Command Redstone Arsenal Ala Directorate of Procurement and Production
THE EXPERIENCE CURVES. VOL. 1. 67% Revised ed.

Nov 64 2p



Revision of rept. dated Sep 62. Available copy will not permit fully legible reproduction. Reproduction will be made if requested by users of DDC. Copy is available for public sale. See also AD-612

(\*ECONOMICS. Descriptors: CPRODUCTION CONTROL. THEORY).

(\*MANPOWER STUDIES, THEORY), INVENTORY CONTROL, INVENTORY ANALYSIS.

MANAGEMENT CONTROL SYSTEMS. MANAGEMENT CONTRO COSTS, TABLES, GRAPHICS.

The experience curve, or the learning or improvement curve, is based on the theory that each time the total quantity of units produced is doubled, the hours or cost to produce the last unit of this doubled quantity will be reduced by a constant per-centage. A 20% decrease in the effort to produce double quantities is referred to as an 80% slope, a 15% decrease as an 85% slope. The pattern of experience curve is hyperbolic when drawn on arithmetical graph paper and is a straight line when drawn on logarithmic (log-log) paper. Factors that contribute to the decline of the unit cost as cumulative production increases are: (1) workers become more familiar with the job due to repetition; (2) development of more efficient tools and machines: (3) improvement in organization and management; and (4) solution of engineering problems. CONTENTS: What is the experience curve: solution of the experience curve using em-pirical data examples of experience curve calculations using empirical data; definition of terms; procedures for the use of the experience curve factor tables; experience curve factor tables: 67 through 84%.

AD-612 804

Army Missile Command Redstone Arsenal Ala Directorate of Procurement and Production THE EXPERIENCE CURVES. VOL. II. 85% THROUGH 99%.

Revised ed. Nov 64 2p

Revision of rept. dated Sep 62. Available copy will not permit fully legible reproduction. Reproduc-tion will be made if requested by users of DDC. Copy is available for public sale, See also AD-612 803.

(\*ECONOMICS. THEORY), Descriptors: CPRODUCTION CONTROL, THEORY),
(\*MANPOWER STUDIES, THEORY), INVENTORY-CONTROL, INVENTORY ANALYSIS. CONTROL MANAGEMENT COSTS. TABLES, GRAPHS.

AD-613 522 Human Resources Research Office George Washington Univ Alexandria V
AN ANNOTATED BIBLIOGRAPHY ON PROFI-CIENCY MEASUREMENT FOR TRAINING OUALITY CONTROL. Research memo.. Robert G. SmithJr. Jun 64 2p Contract DA44 188AR02

(\*BIBLIOGRAPHIES, Descriptors: ING). (\*TRAINING, QUALITY CONTROL). (\*QUALITY CONTROL, TRAINING). EFFECTIVENESS. TESTS. TEST METHODS. HAND-

The bibliography was prepared to provide a basis for a practical manual on quality control in training. Referer 'es have been listed alphabetically by author within five categories: (I) GENERAL: General papers on proficiency measurement, achievement testing, rationales, and bibliographies; (II) TEST MANUALS: Complete manuals for testing programs or performance tests; (III) TEST METHODS: Studies evaluating or describing test methods; (IV) QUALITY CONTROL SYSTEMS: Descriptions of the rationales and procedures for complete quality control systems:
(V) TEST DEVELOPMENT AND DESCRIP-

"TION:"Reports describing tests of various kinds and their development.

AD-615 093 Chicago Univ lil THE WARD MANAGER CONCEPT. IS IT FEASIBLE AND DESIRABLE IN A MILITARY HOSPITAL. Master's thesis. Robert R. Riedle, 31 Mar 65 2p

Descriptors: (\*HOSPITALS, MILITARY FACILITIES), (\*NURSES, MILITARY FACILI-TIES), SUPERVISORY PERSONNEL

The-ward manager concept is regarded as both feasible and desirable in the military hospital. It should help alleviate nursing staffing problems. improve management of the nursing unit, and enhance patient care. It is recommended that a medical administrative supervisor be placed in the position of ward manager on each ward of a military hospital. Should the size and/or activity of a ward not warrant such a position, this person could then be utilized in the capacity of floor manager by overseeing two or more wards as the workload dictates. This person should be assisted by as many medical administrative specialists or apprentice medical administrative specialists (administrative clerks) as needed to accomplish the administrative functions of the nursing units. In determining the proper number, consideration must be given to staffing these units during the day and evening shifts seven days per week. This ward manager position is not intended to replace the head nurse, staff nurse or wardmaster, It is felt that by relieving these people of their administra-tive responsibilities, additional time could be alloted for nursing.

AD-617 059

George Washington Univ Washington DC FACTORS INFLUENCING NURSES IN SELEC-TION OF EMPLOYMENT: A SURVEY OF AN AREA WHERE COMPARATIVELY LOW PAY-ING COMMUNITY HOSPITALS COMPETE WITH HIGHER PAYING FEDERAL HOSPITALS FOR THE REGISTERED NURSES

James E. Gabriel Jun 65 2p

Available copy will not permit fully legible reproduction. Reproduction will be made if requested by users of DDC. Copy is available for public sale.

Descriptors: (\*Nurses, Job analysis), (\*Hospitals. Selection). (\*Job analysis, Nurses), Wages, Employee relations, Time, Factor analysis, Decision making.

A survey of the registered nurses working in five hospitals in one area reveals that they are influenced to different degrees by a variety of employment factors and are attracted to the hospital that offers the factors they consider most important. Generally, the most important factors to the community hospital nurses are those that make work compatible with home responsibilities; they will sacrifice material rewards in order to have 'choice of shift.' In general, the Federal hospital nurses are most concerned with the more career connected factors of 'pay rate,' 'employee benefits,' and 'advancement.' (Author)

AD-617 291 George Washington Univ Washington DC A COMPARATIVE STUDY OF THE EMPLOY-MENT CONDITIONS OF NURSES, Jack C. Bailey.Jun 65 2p

Available copy will not permit fully legible reproduction. Reproduction will be made if requested by users of DDC. Copy is available for

Descriptors: '(\*Nurses. Lahor unions). (\*Hospitals. Personnel management). Bargaining. Wages, Costs, Medicine. Economics, Minnesota, texas. Identifiers: Employment.

The study compares the working condtions of nurses in an area with and without collective bargaining for nurses. The geographical areas chosen for comparative analysis are Minneapolis-St. Paul. Minnesota and Dallas-Ft. Worth, Texas. In accomplishing the study, the expressions of hospital officials and nurses from each of the two areas surveyed and on a national scale were solicited and weighed accordingly. The findings indicated that most labor leaders and nurses favored collective bargaining for nurses. The majority of hospital administrators and a substantial number of nurses! opposed collective bargaining for nurses. In comaring the employment conditions of nurses from 1950 to 1964 in the two areas surveyed, the findings revealed that nurses under collective bargaining have enjoyed higher-wages and better working conditions than nurses not under collec-tive bargaining. However, findings also indicated where nurses had recourse to collective bargaining, the cost of medical care was substantially higher in contrast to national averages and averages in the area which did not bargain collectively with nurses. (Author)

AD-617 334"

Personnel Research Lab (6570th) Aerospace Medical Div Lackland AFB Tex EVALUATION OF OFFICER JOBS VERSUS EVALUATION OF SPECIALTIES, Joe ', Hazel and Joseph M. Madden, Mar 65 2p Rept. no. PRL TR-65-7

Descriptors: (\*Job analysis. Air Force personnel), (\*Air Force personnel, Job analysis). (\*Officer personnel, Job analysis), Personnel management, Wages, Classification, Specifications, Correlation

Evaluation data on 30 officer specialties were gathered from 2 groups of raters for comparison with results previously obtained when jobs were evaluated. With the same 20 factors used previously, 88 officers evaluated the specialties on a point scale against a criterion of merited pay, and another 86 against a criterion of merited grade. In addition, each officer rank-ordered the 30 specialties in terms of the criterion for his group. Correlation matrices were computed based on the mean factor ratings and mean rank-orders of specialties. Differences in evaluation results were as follows: (1) A comparison of matrices based on jobs and specialties revealed there were more negative intercorrelations among factors when ratings were made on specialties (32%), than when jobs were rated (9%). (2) For 15 factors, tests of the differences between validity coefficients on the 4 criteria (merited pay and grade of jobs and merited pay and grade of specialties) indicated the 4 values were not all estimates of the same population value. (3) From multiple regression analyses to predict rank-order from factor ratings, more factors were found which had non-zero weights on job-based criteria than on specialty-based criteria Because of certain advantages with jobs, and the heterogeneity of pay and grade levels within specialties, jobs seem to be the preferable units to use in a point system of evaluation. (Author)

AD-617 416 Iowa State Univ Iowa City DEVELOPING AN EFFECTIVE MANAGEMENT TOOL FOR THE INTERNAL DISTRIBUTION OF MANPOWER RESOURCES IN A THOUSAND-BED UNITED STATES AIR FORCE HOSPITAL Master's thesis.

Jerry L. Moore.Jun 65 2p Contract AF33 608 1072

Available copy will not permit fully legible reproduction. Reproduction will be made if requested by users of DDC. Copy is available for

Descriptors: ( \*Hospitals, Personnel management). (\*Air Force, Hospitals), (\*Medical personnel, Standards), Manpower studies, Military medicine,

A study was made to determine an effective means of distributing personnel on the basis of workload. The study was of a statistical nature, examining relationships between many variables and developing standards based upon these relation-ships. The primary measure of workload was a device currently in use by the Air Force Medical Service known as the Composite Weighted Work Unit. This mechanism applies weighted values to four factors accounting for patient care workload - occupied beds, admissions, births, and outpatient visits -- and treats the combined result as a com-posite measure of workload. This study tested the Composite Weighted Work Unit's adaptability for internal use within a large hospital in measuring departmental workloads against an overall hospital workload, thereby providing a basis for reviewing the distribution of manpower resources. Indicaare that a composite weighted work unit, carefully developed and judiciously applied, can be a valuable management tool in the administration of a large and complex hospital organization. (Extracted)

AD-617-769

AD-617-709
System Development Corp Santa Monica Calif
A STRUCTURED APPROACH TO PERFORMANCE APPRAISAL AND SALARY ADMINISTRATION,
George P. West. 21 Jun 65 2p Rept. no. SP-2130

Descriptors: (\*Performance (Human), Job analysis), (\*Job analysis, Wages), (\*Wages, Performance (Human)), Performance tests. Training,

Conflicting requirements inherent in performance appraisals for salary administration are contrasted to performance appraisal for counseling or training of the individual. An intermediate approach is suggested which resolves these conflicts and provides worthwhile feedback to the individual, while at the same time administering salety actions con-sistently with performance. The process utilizes work-related goals. The supervisor works with the individuals to find challenging work assignments for all his subordinates and evaluates the work. pointing out specific areas of weakness or of unusually high quality work. Comparison is made to an imagined average or typical individual, By relating the quality of the work performed by different individuals (as measured by the common traits score), the supervisor can recommend sala-ries consistent with the quality of the work accomplishments of his people. (Author)

AD-620 840

Naval Personnel Research Activity San Diego Calif

A METHOD FOR STRUCTURING TECHNICAL

A NETHOD FOR SINCETCHING TECHNICAL TASKS (TECHNICAL SUPPLEMENT), Joe Silverman. Aug 65 2p Rept. no. STB-66-4A Available copy will not permit fully legible reproduction. Reproduction will be made if requested by users of DDC. Copy is available for public sale. See also AD-620 839.

Descriptors: (\*Naval personnel, Selection), (\*Job analysis, Maintenance), Weapon systems, Instruction manuals, Classification, Psychometrics, Operators (Personnel), Machines, Heat exchangers. Identifiers: SAMOA.

Research was conducted to develop a method for determining the basic technical skills for current and future weapons and support systems so as to provide the basis for the Navy enlisted personnel classification structure required for the next decade. The engineering department in destroyers was relected for the pilot study. The method being developed in this research involves the analysis of tasks and patterns of tasks in terms of the Techni-

cal, Organizational, and Communicational dimensions of the work situation. The acronym SANIOA (Systematic Approach to Multidimensional Occupational Analysis) was adopted as a label for this method. In developing the variables that characterize the Technical dimension, techniques for measuring the 'complexity' and 'variety' of tasks were devised. The report contains the following sections: structure of functions scales, equipment rating form, engineering task lists, task complexity classification list, task comparison forms.

AD-622 664

System Development Corp Santa Monica Calif MAN-JOB-MATCHING AND PERSONNEL IN-FORMATION MANAGEMENT.

Professional paper, John M. Leiman, 3 Aug 65 2p Rept. no. SP-2160 Prepared for presentation at the NATO Conference on Operational and Personnel Research in the Management of Manpower Systems at Brus-sels (Belgium) 16-20 Aug 65,

Descriptors: (\*Manpower studies, Job analysis), (\*Job analysis, Manpower studies: (\*Personnel management, Psychometrics), Performance (Human), Personality, Motivation, Reviews, Analysis

The paper provides: a description of a model for the man-job matching process; a discussion of the various constraints and assumptions necessary to make the model applicable to typical operational conditions; and a discussion of the state-of-the-art in the prediction of job performance in new assignments. 'Hard' variables are defined as personal characteristics which are related to measurements of a man's current skills and knowledge .. these were found to account for about half the variance in job performance in new assignments. 'Soft' variables are defined as personal characteristics related to a man's motivation or the manner in which he applies his skills and knowledge in new situations -- these were found to have only marginal utility in the prediction of performance in new assignments. The paper then describes a procedure for developing job performance indices which are required inputs to the man-job matching model described earlier. (Author)

AD-623 393

Carnegie Inst of Tech Pittsburgh P Graduate School of Industrial Administration MODELS AND MODELLING FOR MANPOWER PLANNING. Management Sciences research rept., W. R. Dill, D. P. Gaver and W. L. Weber. Sep 65 2p

Rept. no. MSRR-51

Contract Nonr76024

Descriptors: (\*Manpower studies, Management planning), (\*Personnel management, Mathematical models), Statistical processes, Stochastic processes, Probability, Mathematical prediction, Simulation. Identifiers: Hierarchy.

The paper reviews some earlier quantitative work in personnel flow and manpower planning. It describes the necessity and uses for models, and the means for their development and manipulation. It proposes models for several idealized hierarchical situations, and deduces data requirements and implications. Simulation and new problems are both treated. (Author)

AD-623 529 Purdue Univ Lafayette Ind A COMPARISON OF RECOGNITION AND RE-ALL METHODS OF OBTAINING JOB INFOR-MATION. Doctoral thesis.

Joseph Edward Zuro. Aug 65 2p Contract AF41 609 1604

Descriptors: (\*Job analysis. Air force personnel), Officer personnel, Supervisory personnel, Recall, Memory, Manpower studies, Personnel management, Sampling, Statistical analysis, Correlation

The study was designed to determine whether there are significant differences in quantity and quality of job information obtained by recognition and recall methods of job analysis, as represented by two checklist inventories and an open end oy two crecums are secondary purpose was to determine whether there are significant differences in the job information obtained by two checklist inventories which differ in the source of the data used in their construction. One, designated a recall source inventory, was prepared from recall information submitted by job incumbents. The other instrument, designated a recognition source invento-ry, was constructed by subject matter-experts. From a population of 575 jobs whose incumbents had completed the three survey instruments, a stratified sample of 22 jobs was selected.

AD-624 048

Human Resources Research Office George Washington Univ Alexandria V
A MODEL OF JUNIOR OFFICER JOBS FOR
USE IN DEVELOPING TASK INVENTORIES.

Fechnical rept., Harry L. Ammerman. Nov 65 2p Rept. no. tr-65-10 Contract DA-44-188-ARO-2

Descriptors: (\*Job analysis, Personnel management). (\*Officer personnel. Job analysis), (\*Army personnel. Job analysis), (\*Personnel management. Job analysis), Decision making. Military

A job description procedure was developed for use by Army service schools in identifying all of the tasks performed by junior officers in a job assignment. This procedure was based on a model of signment. This procedure was based on a model or officer job behavior, illustrating the nature and sequence of tasks performed to attain specific goals within each area of responsibility. The behavior model was itself developed from considerations of existing job descriptions, the nature of job information typically provided by interwith officers, and an informationprocessing view of purposive behavior. Applica-tion of the description technique to one officer job yielded 816 tasks covering troop leadership and unit management, as well as tactical and technical functions. General statements of work were effectively broken into task-level statements of job activities. The technique should provide a practical means for describing most supervisory and command jobs characterized by a high proportion of variable, nonroutine, and covert activities.

AD-624 747

Sau Antonio Air Materiel Area Kelly AFB Tex Directorate of Maintenance
THE USE OF STATISTICAL CONTROL CHART
TECHNIQUES IN A SICK LEAVE CONTROL
PROGRAM.

Roy M. Wimpee and James H. Smith.Oct 65 2p

Descriptors: (\*Personnel management, Industrial medicine), (\*Industrial medicine, Personnel management), Statistical analysis, Quality control, Medicine, Management engineering, Government employees, Civilian personnel, Public health.

Sick leave records can be analyzed by control charting techniques such as are commonly used in statistical quality control. These techniques do three things: (1) compute the amount of variation in the sick leave rate that can be expected from normal chance variations, (2) compare this value with the actual variations experienced, and (3) identify variations that are too large to explain by chance. Organizations with large variations have



some definite cause - some specific health problem e- other than normal chance variation af-fecting their sick leave rate. After identifying the organizational components with health problems in this way, medical personnel can be directed to those specific areas to find and eliminate the health problems. This procedure directs professional medical assistance to those areas where it is needed, without the expense of using medical talent in all areas. One such method of statistical analysis of sick leave records, developed for and used by a large industrial organization, is described, (Author)

AD-628 162

Human Resources Research Office George Washington Univ Alexandria V THE FEASIBILITY OF DEVELOPING A TASK CLASSIFICATION STRUCTURE FOR ORDER-ING TRAINING PRINCIPLES AND TRAINING CONTENT.

Research memo. Donald F. Haggard Jan 63 2p

Descriptors: (\*Behavior, Classification), (\*Training. Management engineering). (\*Job analysis, Classification), Military training. Feasibility studies, Learning, Systems engineering.

The report explores the need for developing a nethod of systematic analysis, description, and classification of behavioral events as a preliminary step in evolving generalized theoretical formulations and utilizing available knowledge. The theory and-methodology of taxonomy are reviewed in relation to the problem of integrating empirical knowledge obtained from discrete behavioral events. Current efforts to construct taxonomic systems for behavior are examined. An organization of effort is suggested for further development of (1) a theoretical framework for interrelating behavioral research at all levels of generality and (2) a more restricted task classification system for ordering training principles and training content. (Author)

# AD-426 952

Personnel Research Lab (6570th) Aerospace Medical Div Lackland AFB Tex IDENTIFICATION OF JOB REQUIREMENT FACTORS BY USE OF SIMULATED JOBS.

Joseph M. Madden and M. Joyce Giorgia. 1965 2p Availability: Published in Personnel Psychology. A Journal of Applied Research, v18 n3 p321-31 1965. Copies to DDC users only.

Descriptors: (\*Air force personnel, Job analysis), (\*Job analysis, Air force personnel). (\*Officer personnel. Job analysis), Simulation, Factor analysis, Identification, Verbal behavior, Wages.

Air Force officer jobs are evaluated by rating a verbal job description on ten requirement factors. If these factors cover all the requirements, judging merited pay or grade for the job incumbent could be based on a simulated job description presenting only the numerical ratings on the ten factors. To test this assumption, two groups of USAF majors ranked thirty real job descriptions and two groups ranked simulated descriptions in order of merited pay. Application of a multiple regression technique to the factor values showed that error in predicting the rank-order criterion was signifi-cantly greater for rankings from simulated descriptions than from the verbal descriptions. Examination of mean-rank discrepancies showed that, in this particular sampling of jobs, the ranking of simulated jobs was higher for jobs closely concerned with the primary defense mission and lower for jobs requiring a high level of scientific, professional, or technical competence. Adding ratings on these two factors to the simulated descriptions might result in judgments closer to those obtained from verbal descriptions. (Author)

AD-429 164

Foreign Technology Div Wright-Patterson AFB

ORGANIZATION OF LABOR OF MEDICAL PERSONNEL.

B. M. Matsko. S Nov 65 2p Rept. no. FTD-TT-65-970, TT-66-60694

Unedited rough draft trans, of mono, Organizat-siya Truda Meditsinskogo Personala, Moscow,

Descriptors: (\*Medical personnel, USSR), Personnel management, Hospit ds. Job analysis. Nurves.

Contents: Systems of work of coctors of amalgamated urban hospital: Schedule of work of doctors in hospitals, polyclines and home visits: Distribu-tion of working time of doctors in polyclinics, in hospitals and for house calls: Two-stage system of vice of patients: On standardization of work of doctors of main specialities in urban, regional and clinical inospitals.

AD-429 573

Personnel Research Lab (6570th) Aerospace Medi-Cal Div Lackland AFB Tex EVOLUTION OF A JOB INVENTORY AND TRYOUT OF TASK RATING FACTORS, Joseph E. Morsh. Dec 65 2p Rept. no. PRL-TR-65-

Descriptors: ("Air force personnel, Job analysis). (\*Job analysis, Air force personnel), Air force training, Personnel management, Classification. Identification, Learning, Performance (Human), Programming (Computers), Strategic Air Command. Identifiers: On-the-job training.

The results of surveys of the Personnel Career Field conducted in 1939, 1961, 1963, and 1964 are reported. Improvements in inventory content and format and in administrative procedures were in-corporated with each successive survey. In the last 2 surveys incumbents completed a background in-formation sheet and rated the relative time spent on tasks. A computerized hierarchal grouping procedure applied to the time-spent data was used to identify and describe job types. In the 1962 survey 35 significant job types were found. In the 1964 survey 34 job types were identified. Job types tend to cut across commands and to some extent across grades and specialties. In the 1964 survey, in addition to relative time spent, subsamples of incumbents used 4 other task rating factors: incuments used a other task rating factors: technical assistance required, frequency of per-formance, difficulty of learning by on-the-job training, and training emphasis. Results of the tryout of these ratings are also reported, (Author)

AD-429 575

Personnel Research Lab (6570th) Aerospace Medical Div Lackland AFB Tex OFFICER GRADE REQUIREMENTS PROJECT. II. JOB DESCRIPTIONS, SAMPLE SELECTION, AND CRITERION BOARD, Joe T. Hazel. Nov 65 2p Rept. no. PRL-TR-65-18,

Descriptors: (\*Air force personnel, Officer personnel), (\*Officer personnel), Selection), (\*Job analysis, Officer personnel), Military requirements, Classification, Standardization, Tables.

The Officer Grade Requirements Project was undertaken to determine an optimal Air Force officer grade structure, stated in term of the number of officers required in grades he tenant through colonel. Due to its scope, several reports are necessary to explain the project. The first report of the series gave the purpose, phases, and a description of the method and preliminary findings. The present report describes in detail the three following steps of the project: (1) development of a suitable format and collection of standardized job descriptions of the work performed by approximately 80,000 officers; (2) selection of a

criterion sample of 3.575 descriptions representing all levels and types of officer jobs: (3) selection and conduct of a Headquarters USAF Policy Board to provide criterion measures (grade ratings for the job sample, (Author)

AD-630 127

System Development Corp Falls Church V SIMULATED DESIGN OF A HOSPITAL PA-

TIENT DATA SYSTEM,
Harold H. Wilson, 1963 2p
Availability: Published in Data Processing for
Management Magazine of May 1963, Copies to DDC users wals.

Descriptors: (\*Data processing systems, Medicine), (\*Medicine, Data processing systems). Hospitals, Medical research, Simulation, Design, Data, Pera-anel management, Medical personnel, Computers, Medical examination.

Naval Personnel Research Activity. San Diego. COURSE DESIGN MANUAL FOR JOB TRAIN-ING COURSES (A PRELIMINARY EDITION). Research rept., Edward A, Rundquist, Mar 66, 127p Rept. no. SRR-66-17

Descriptors: (\*Naval training, Instruction manuals), (\*Instruction manuals, Preparation), ("Job analysis. Combat information centers). Training devices, Teaching methods, Learning, Effectiveness, Naval personnel, Performance (Human), Military requirements.

The report is a preliminary edition of a manual designed to assist instructors in developing and im-proving job-related training courses. The course process is explicated in nine operational steps. Suggestions are developed for accomplishing each step. Material from actual course design is used to illustrate the steps. (Author)

AD-630 911

Purdue Univ Lafayette Ind Occupational Research Center THE IDENTIFICATION, MEASUREMENT AND

FACTOR - ANALYSES - OF NTED JOB VARIABLES. WORKER-ORIE-

Rept. no. 3 George G. Gordon and Ernest J. McCormick.Jul 63 2p Rept. no. Contract Nonr-1100 (19)

Descriptors: ("Industrial psychology, Job analysis), ('Job analysis, Factor analysis), Employ-ment, Measurement, Identification, Psychometrics. Personnel, Applied psychology, Reliability, Performance (Human), Correlation techniques.

The following conclusions were drawn from the results of the study: (1) Jobs can be viewed from a framework of the activities that the incumbent performs: yet this framework need not be so specific that it cannot be generalized across dif-ferent jobs, occupations, industries or geographi-cal areas. (2) The application of psychological scaling techniques to the measurement of job variables is quite fruitful, even in the light of the effort that must be expended in scale construction. In each reliability study, the average reliability of the scaled items was clerily superior to that of the other items. (3) The factor analyses of workeroriented variables defined a number of dimensions which seemed to be both meaningful and poten-tially useful. It was especially encouraging to note relationships between the factors emerging from this study, and those found is other studies of worker traits or job requirements. (Author)

AD-630 915 Naval Personnel Research Activity San Diego



A NETWORK FLOW TECHNIQUE FOR OP-TIMIZING PERSONNEL ON BOARD BY PAY GRADE Research rept.

Denald F, Hayter and Richard D. Conner. Feb 66 2p Rept. no. SRR-66-12.

Descriptors: (\*Personael management, Programming (Computers)), \*Naval personnel, Optimization), Models (Samurations), Recruitment. Flow charting, Many ower studies, Mathematical prediction, Iterative methods.

The report describes one of a series of computerized techniques developed by this Activity in a continuing research program to provide the Bureau of Naval Personnel with new and improved methods for carrying out its enlisted personnel planning functions. The technique is based upon a network flow model uniquely designed for allocating present and future enlisted manpower resources within the limits of constraining factors in a manner that will meet manpower requirements as closely as possible In short, it is a planning technique for optimally allocating personnel on board at all pay grades of a rating for the next five years. The model considers the present number of personnel on board at each pay grade of a rating and will attrite and advance them realistically in future time periods. The future allocation of personnel among pay grades is optimized for a fiveyear period relative to the pay grade requirements within the constraints of predicted personnel attrition, advancements, reductions in grade (demotions), and the nonpetty officer base. (Author)

AD-631 023
HRB-Singer Inc State College P
GUIDEBOOK FOR THE COLLECTION OF
HUMAN FACTORS DATA.
Final rept.,

Louis B. Myers. Robert G. Carter and Robert S. Hosteller.Jan 66 2p Rept. no. 79211-F NAVPERS-PTB-66-3

Contract Nonr-4751 (00)

Descriptors. (\*Human engineering, Handbooks). Data, Systems engineering, Analysis, Maintenance, Personnel management. Time studies.

The guidebook was developed primarily as a retained to aid the Project Officer in the assessment of human factors effects on system performance and in the isolation of the causal factors. There are three sections to this guidebook, each serving a different purpose. Section I provide the necessary background information and sets the perspective for the use of the techniques and materials presented in Section II. This section contains the tools and techniques for system evaluation. This includes methods for obtaining time, accuracy, and maintenance data as well as the techniques for analyzing and interpreting these data. Methods for obtaining qualitative data through questionnaires and checklists are also contained in this section, including sample questionnaires and checklists. The third section (Section III) contains a fairly detailed example of the application of the previously described techniques Also included are rather complete lists of test objectives and criteria measures. (Author)

AD-631 090
Stanford Univ Calif Dept of Industrial Engineering
QUALITY COST ANALYSIS IMPLEMENTATION HANDBOOK,
Dönald E. Morgan and W. Grant Ireson. 15 Sep 64
2p
Contracts AF 18 (600)-2021

Descriptors: (\*Cost effectiveness, Handbooks), (\*Quality control, Costs), Optimization. Management planning, Management control systems. Identifiers: Cost analysis.

The QUICO (Quality Improvement through Cost Ontimization) system covers the planning, installation, and use of quality cost data analysis. The basic idea is simply to operate a manufacturing unit or complex so that the total of quality related costs is a minimum. Quality related costs are made up of (1) expenses incurred because of not produc-ing the highest possible quality (resultant costs). (2) expenditures made to create conditions resulting in high quality products (quality creation costs), and (3) expenditures made to measure quality levels being produced and causes of deficiencies (quality and defect inference costs). Analysis of quality cost data provides direct pay-offs in reduction of resultant costs and the major sources are discussed. Secondary benefits come from use of the data as a measurement of the effectiveness of the quality assurance effort, as a motivant to workers who must produce the high quality, and as a management guidance tool. Suggested cost accounts are given along with suggested methods of summarizing and displaying data in the most meaningful way for all levels of use Almost all companies now have sufficient cost data to estimate cost reductions to be expected from the QUICO system. (Author)

AD-633 190 George Washington Univ Washington D C PATTERNS - AND TRENDS OF CONTROLS GOVERNING THE PROFESSIONAL ACTS OF HOSPITAL NURSING PERSONNEL; Joseph A. Baird Jr. Apr 66 2p Contracts AF 33 (608)-1232.

Descriptors: (\*Nurses, Personnel management), (\*Job analysis, Nurses). Hospitals, Law. Control.

In order to control the scope of hospital nursing practice, six patterns of control have evolved: control by statutes, court interpretation of statutes, opinions of state attorneys general, state administrative boards, private organizations, and hospital policy-making bodies. The effectiveness of these controls and the legal-limitations on utrising acts have varied from state to state. Some general nursing practice parameters have been set, but the lines have been poorly marked, and there are still many gray areas in hospital nursing practice. This has led to trends to modify the controls to correct their weaknesses. These have simply been trends, so that in many situations nurses still do not know their legal limitations. The problem still exists. One solution in the form of a realistic formal plan is available to nurses if they will unite to install the plan to resolve scope of practice questions in each state as they arise. (Author)

AD-633 195
Minnesota Univ Minneapolis
A-STUDY OF PHYSICIAN TIME EXPENDED
ON PATIENTS BEING-EVALUATED FOR AIR
FORCE RETENTION, SEPARATION OR
RETIREMENT.
Master's thesis,
Frank J. MayJr..Mar 66 2p
Contracts AF 33 (608)-1253,

Descriptors: (\*Medical personnel. Time studies). (\*Air force personnel. Medical examination). Selection. Personnel management. Decision making. Hospitals. Military medicine.

AD-633 474
Human Resources Research Office George
Washington Univ Alexandria V
THE DERIVATION, ANALYSIS, AND CLASSIFICATION OF INSTRUCTIONAL OBJECTIVES.
Technical rept.,
Harry L. Ammerman and William H.
Melching, May 66 2p Rept. no. TR-66-4,
Contracts da-44-188-ARO-2,

Descriptors: (\*Education. Management planning), (\*Job analysis, Education), Performance (Hu-

man), Students, Analysis, Psychometrics, Behavior.

An examination of the methods, terms, and criteria associated with the determination of student performance objectives was made in order to synthesize and apply the relatively new develop-ments in Human Factors research on this subject. Educational and training research literature on the subject was examined to identify procedures cur-rently being used or proposed. A survey of eight Army service schools was conducted to determine procedures employed by instructional personnel in determining course content. On the basis of data obtained, important problems arising in connection with the development of objectives are identified and analyzed. A system for analyzing in-structional objectives by identifying factors that influence their meaningfulness and usefulness was developed. Types of student performance objectives are listed, and a classification scheme for terminal objectives is suggested. The classification is based on five factors on which a statement of an objective may vary, affecting the nature of the student action description and the communicability of the statement itself. The variety of terms associated with objectives are discussed. (Author)

AD-635 248
Texas A and M Univ College Station
PROBABILISTIC MANPOWER FORECASTING.
Master's thesis.
James Fitzhugh Koonce.May 66 2p

Descriptors: ("Manpower studies; "Management planning), ("Probability, Manpower studies), Mathematical prediction. Identifiers: Theses.

The use of the methods presented in this report are limited only by the availability of accurate data.

Any organization that does not presently employ a system of preparing and using planning data will undoubtably find it difficult to initiate such a data gathering network. However, use of the statistical techniques embodied in this report will provide a manpower planning system that is more up-to-date than most now in use. These methods give realistic planning figures that take into account the likelihood that some projects will not materialize. In addition, many other planning costs, such as hiring and layoff, purchase and salvage, and several types of operating costs, can be derived from such a manpower plan. Additional study in these areas is presently under way by the research group. The major-result of using these techniques will be to provide top management with a 'lookahead capability that will pin-point real and potential problem areas in budgeting and in large fluctuations in manning. By identifying these problems before they arise, economical and efficient improvements to long range plans can be made early enough to avoid expensive mistakes. By thus preventing or greatly reducing large wastes, the organizade. will be able to fulfill its mission more economically. In short, this research has developed a powerful tool for management's use. (Author)

AD-635 901
Naval Personnel Research Activity San Diego
Calif
A COMPUTER TECHNIQUE FOR CLUSTERING TASKS.
Progress rept.
Joe Silverman. Apr 66 2p Rept. no. STB-66-23
See also AD-465 851, 620 839, -620 840.

Descriptors: (\*Job analysis, Statistical processes), (\*Statistical processes. Data processing systems), Computers, Human engineering, Classification, Naval personnel.
Identifiers: SAMQA. Clustering (Psychology).

The report describes an advanced computerized technique for clustering work tasks. The ultimate objective of this research is to devise a method for

determining the basic technical skills needed to man current and future weapons and support systems in order to provide a basis for the Navy enlisted personnel classification structure required in the next decade. This technique produces homogeneour clusters of task patterns using an input of tasks performed in a simple of jobs. These clusters represent the occupational specialties that exist in a field of work. The most important features of this technique are: (1) its capacity for computer analysis of task patterns of large num-bers of subjects; (2) its capability for computer assistance in making research decisions at various levels of task analysis; and (3) its flexibility as a tool of pattern recognition and structuring. With only minor modifications, the computer programs and concepts described in this report should be of interest of those concerned with other clustering, classifying, and taxonomic techniques. (Author)

AD-637 617

Naval Personnel Research Activity San Diego Calif

SAMOA-A METHOD FOR DETERMINING WORK REQUIREMENTS.

Research rept.
Malcolm J. Carr and Joe Silverman. Jun 66 2p
Rept.no. SRR-66-23

Descriptors: (\*Job systems), (\*Naval personnel, Classification), Selection: Weapon systems, Computers, Programming (Computers), Identifiers: SAMOA.

The report outlined the development of the SAMOA method for occupational analysis. This method may be characterized as (1) a multidimensional approach which stresses the 'work situation and (2) a set of quantitative computerized techniques for the application of this approach. The identification of homogeneous work clusters on the basis of technical, organizational, and com-municational dimensions which the SAMOA method provides should, when analyzed together with various administrative constraints, provide the basis for a sound Navy enlisted personnel classification structure. The SAMOA method also provides a number of additional advantages in regard to methodology. First, the computerized data processing programs provide a very rapid means for analyzing work requirements data (e.g., task lists, contact data, personal and organizational in-formation, etc.) provided from any source. Second, the major phases of the method are independent so that data pertinent to any one of the three dimensions can be analyzed separately; i.e., clusters can be developed without analyzing TOC variables, and variables can be analyzed relative to work groups without using the clustering techniques. Finally, the techniques are adaptable for use with other variables, such as those nor-mally used in job evaluation studies. (Author)

AD-643 508

Naval Personnel Program Support Activity, Washington, D. C. Personnel Research Lab.

JOB EVALUATION: SELECTING THE TYPE OF SYSTEM FOR NAVY USE.

Progress rept. Alexander J. Rose. Nov 66, 25p WRM-67-7 See also AD-639 165.

Descriptors: (\*Job analysis. Navy). (\*Personnel management. 'Naval personnel). Factor analysis. Classification. Management engineering.

This is the third in a series of research reports leading to the design and development of a billet evaluation system for Navy enlisted billets. This report analyzes and reviews the four conventional methods of job evaluation in terms of their appli-cation to Navy billets. The report concludes that the point rating method of job evaluation is the best technique for determining the relative value of Navy billets. It recommends that work proceed on developing the details of a point rating system tailored to the mission and needs of the Navy. (Author)

AD-644 054

George Washington Univ., Ale Human Resources Research Office. Alexandria. Va. THE DESIGN OF INSTRUCTIONAL SYSTEMS. Technical rept.. Robert G. Smith. Jr. Nov 66, 92p TR-66-18 Contract DA-44-188-ARO-2

Descriptors: (\*Training, Cost effectiveness). Programmed instruction. Training devices. Transfer of training, Systems engineering. Learning. Students, Performance (Human). Teaching methods. Efficiency.

The report, based on an extensive survey of current literature, describes and discusses a system approach to designing training and considers factors bearing on training effectiveness. An efficient instructional system is conceived as one in which the components form an integrated whole, achieving maximum effectiveness at the lease ossible cost. Components considered in this repo presentation media, student mana ent. techniques for practicing knowledge and per-formance, knowledge of results, directing student activities toward the goals of the training program. and testing and evaluating the system in terms of efficiency and cost. (Author)

AD-646 217

Naval Personnel Program Support Activity, Washington, D. C. Personnel Research Lab PROPOSED CONTENT OF AN ENLISTED PER-SONNEL COST MODEL: Roy W. Gettings. Dec 66, 63p-WRM-67-18

Descriptors: (\*Naval personnel. Costs). (\*Cost effectiveness. Naval personnel). Naval training, Computer programs. Data processing systems. Input-output devices, Budgets, Standards. Systems engineering, Military personnel.

This report presents an outline of a proposed enlisted personnel cost model. The need to develop such a computerized cost model has become evident with the increasing number of requests for cost data from a wide variety of Navy and Department of Defense offices. The approach has involved an analysis of the present enlisted personnel cost system in terms of input, processing, and output. Revised outputs have been designed to provide concise reports of information frequently required. Modifications to the training cost reports are recommended as necessary to provide the revised outputs.

AD-647 407 Research Analysis Corp Mclean Va PROGRAMMED INSTRUCTION AND TEACHING MACHINES IN THE FIELD OF MEDICAL EDUCATION: AN ANNOTATED BIBLIOGRAPHY.

Technical paper. Laura A. Reynolds. Nov 66, 20p Rept no. RAC-TP-235

Descriptors: (\*Medical personnel. Education). (\*Medicine. \*Programmed instruction), Teaching machines. Teaching methods. Bibliographies. Computers, Learning.

The bibliography contains a selected list of articles and reports, with annotations, regarding programmed instruction and teaching machines in the field of medicine. Authors' abstracts, with occasional minor changes, are given where available.

Papers that have been written concerning the use of computers as teaching machines are included. (Author)

Personnel Research Lab Lackland AFB Tex

RELIABILITY OF JOB RATINGS AS A FUNC-TION OF TIME SPENT ON EVALUATION, Joe T. Hazel. 1966. 4p Availability: Published in Journal of Industrial

Psychology v4 nl p16-9 1966.

Descriptors: (\*Job analysis, Reliability), (\*Timé studies. Job analysis), Factor analysis. Identifiers: Evaluation.

The study was undertaken to determine whether reliability increases as a function of the time snent by raters in providing job evaluations. The results showed that there is no optimal or desirable time period for raters to spend on the job evaluation task in order to achieve more reliable ratings. There was no indication of a substantial trend for reliability of job ratings to increase as a function of the time spent on evaluation. The data also suggests that slower raters are not more indecisive in assigning ratings than rapid raters. (Author)

Naval Personnel Program Support Activity Washington D C Personnel Research Lab JOB ANALYSIS: SELECTING THE TYPE OF SYSTEM FOR NAVY USE, Mark E. Johnson. Feb 67, 27p Rept no. WRM-67-

Descriptors: (\*Job analysis, Personnel management). (\*Personnel management, Naval personnel). Inventory, Computers, Information retrieval, Data storage systems, Data processing systems, Training.

The principal objective of this report is to design and develop a multi-purpose occupational analysis system. The system will provide current, accurate, detailed information for users of occupational data, and will also serve as a basis for further studies in associated fields of personnel management. In the phase of the study reported here, methods of occupational analysis used by other military services and the Department of Labor, reported previously, are reviewed briefly and appraised in terms of their applicability to Navy billets. A method for developing an occupational analysis system suitable to the Navy is proposed. It em-ploys the most recent advances in the techniques of collecting, analyzing, storing and retrieving occupational information. The method proposed calls for the establishment of a computerized occupational data bank, and for the use of billet inventories in the collecting of occupational infor-mation. The report recommends that the proposed method be used to conduct an occupational analysis of the Boatswain's Mate and Radioman ratings. and that this work be considered as a pilot test of the method for its subsequent application to all Navy enlisted billets.

AD-649 907 George Washington Univ Alexandria Va Human Resources Research Office AMOUNT OF ASSIGNMENT INFORMATION AND EXPECTED PERFORMANCE OF MILITA-RY PERSONNEL. Technical research rept. Richard C. Sorenson. Feb 67, 57p Rept no. APRO-TRR-1152

Descriptors: (\*Military personnel, Performance (Human)). (\*Manpower studies, Military personnel). Computers, Automation, Personnel management. Optimization. Predictions. Least squares

The COMPUTERIZED MANPOWER SYSTEMS Task seeks to integrate the growing body of psychological. mathematical, and computer technology in the solution of problems in military manpower. One of its objectives has been to develop computer-aided research approaches and simulation tools useful in (1) defining general principles of manpower systems and (2) formulation and evaluation of manpower policies and

procedures. Technical Research Report 1152 summarizes the research methodology developed or adapted by the U. S. Army Personnel Research Office to deal with manpower information problems. Particular concern is with relationships between the amount and type of information on which assignment decisions are made and the per-formance of the Army's enlisted personnel. Typi-cal findings are: Total performance of Army en-listed personnel could be enhanced by using as performance estimates in optimal assignment procedures the full 2- or 3-digit scores on qualification measures. The effect of the one-digit score is more serious when the range of ability in the allocation group is narrow and when the general level of ability is lowered. More precise prediction of job performance could be attained by introducing performance estimates more closely resembling least squares regression estimates based on the full Army Classification Battery. Total performance could be increased by refinement of the Army Personnel System to afford additional job categories. Optimization techniques may be beneficially applied in the manpower system even though estimates of performance are ordinal (including various ways of ranking) and the assumption of an interval scale is not strictly met.

#### AD-650 129

Rand Corp Santa Monica Calif COST-EFFECTIVENESS: SQNE TRENES IN ANALYSIS,

E. S. Quade. Mar 67. 19p Rept no. P-3529 Prepared for presentation during the course. 'Cost Effectiveness-The Economic Evaluation of Engineered Systems', held at the California Univ., Los Angeles, 27-31 Mar 67.

Descriptors: (\*Cost effectiveness, Systems engineering), (\*Man-machine systems, Computers), Decision making, Game theory, Interactions, Predictions, Operations research, Mathematical analysis.

Cost-effectiveness analysis is not a static craft: while it still may be more an art than a science, its practitioners are constantly striving to widen its area of application and to improve it by introducing better methods of analysis. New approaches and techniques are being proposed constantly. Most of these are primarily mathematical in nature, but a few arc directed toward a better treatment of those aspects of its problems that cannot be handled by purely quantitative methods. Emphasis in this paper will be on the latter. The author does not attempt to be comprehensive but merely notes three trends involving, respectively: computers, mathematics. 9 and the direct use of expertise. The author discusses the first two only briefly, but describes the last in some detail.

### AD-653 543

Personnel Research Lab Lackland AFP Tex COMPUTATION OF GROUP JOB DESCRIP-TIONS FROM OCCUPATIONAL SURVEY DATA.

Wayne B. Archer, Dec 66, 41p Rept no. PRL-TR-66-12'

Descriptors: (\*Job analysis, \*Air force personnel). Medical personnel. Performance (Human). Classification.

The analysis of occupational survey data is demonstrated in detail, using miniature examples. Beginning with the responses of 10 incumbents to a job inventory consisting of 10 task statements, composite job descriptions are derived for (a) special groups of incumbents, selected on the basis of background information data; and (b) job type members, identified by an automated job clustering program. Computer outputs from both types of analyses are illustrated and explained. (Author)

### AD-655 511

Urs Corp Sierra Vista Ariz Arizona Systems Center FUNCTIONAL AREA DESCRIPTION PATIENT ACCOUNTING ANNEX A, FOR THE STUDY OF A METHOD FOR INTEGRATION OF MEDICAL ACCOUNTING, REPORTING, SUPPLY, AND REGULATING OF THE ARMY IN THE FIELD INTO THE ADSAF PROGRAM.

1 Oct 65. 121p

Contract DA-04-495-AMC-671 (R) See also AD-655 510.

Descriptors: (\*Military medicine, Documentation). (\*Casualties, Military medicine). Medical personnel, Models (Simulations). Cost effectiveness. Reports. Medical supplies: Military intelligence. Data processing systems. Feasibility studies. Evacuation, Military organizations, Communication systems. Logistics, Management engineering, Hospitals, Job analysis.

The Patients Accounting Functional Area is that process which provides for the collection, recording, summarizing, and reporting of data regarding patients hospitalized and/or evacuated in the Army in the field. It includes the responsibility for satisfying those essential patient data requirements of elements or agencies superior to, or in support of, medical treatment facilities in a theater of operations. This document describes the current patients accounting system in one division, one corps, one field army, and one theater army command. It is assumed that these operations will be applicable in all similar organizations, i.e. one division operation typifies all divisions, one corps typifies all corps, etc.

#### AD-655 512

Urs Corp Sierra Vista Ariz Arizona Systems

FUNCTIONAL AREA DESCRIPTION MEDICAL REGULATING ANNEX B, FOR THE STUDY OF A METHOD FOR INTEGRATION OF MEDICAL ACCOUNTING, REPORTING, SUPPLY, AND REGULATING OF THE ARMY IN THE FIELD INTO THE ADSAF PROGRAM.

1 Oct 65, 66p Contract DA-04-495-AMC-671 (R) See also AD-655 511.

Descriptors: (\*Military medicine, Documentation), (\*Casualties, Military medicine), Medical personnel. Cost effectiveness. Reports. Medical supplies. Military intelligence. Datas processing systems. Feasibility studies. Models (Simulations). Evacuation, Hospitals. Military organizations. Cemmunication systems, Logistics. Management engineering, Job analysis.

Medical regulating is that part of the overall sphere of medical operations which coordinates and controls the movement of patients to the medical facilities which are best able to provide care at that time. Many factors are considered in controlling the movement of patients through the hospitalization and evacuation system. Some of these factors are current bed status of treatment facilities (i.e., beds occupied), not occupied); surgical backlog in hours; location of facilities with specialty capabilities; number and location of patients by diagnostic category; tactical situation in the combat zone; location of airfields and railheads; medical resources available at each treatment facility; and availability of transportation.

## AD-655 513

Urs Corp Sierra Vista Ariz Arizona Systems Center

CENTET FUNCTIONAL AREA DESCRIPTION MEDICAL SUPPLY ANNEX C, FOR THE STUDY OF A METHOD FOR INTEGRATION OF MEDICAL ACCOUNTING, REPORTING, SUPPLY, AND REGULATING OF THE ARMY IN THE FIELD INTO THE ADSAF PROGRAM.

1 Oct 65, 128p Contract DA-04-495-AMC-671 (R) See also AD-655 512.

Descriptors: (\*Military medicine. Documentation). (\*Medical supplies, Military medicine).

Casualties. Medical personnel. Cost effectiveness, Reports. Military intelligence. Data processing systems. Feasibility studies. Models (Simulations), Evacuation, Hospitals, Inventory control, Logistics, Military organizations. Communication systems. Management engineering. Job analysis.

The operational objectives of medical supply are (1) to provide an adequate, timely, and constant supply of ali items necessary to give complete medical service to every sick or injured individual in the command: (2) to provide maintenance of all items of medical equipment; and (3) to provide spectacle fabrication.

#### AD-656 304

Personnel Research Lab Lackland AFB Tex IMPACT OF THE COMPUTER ON JOB ANAL-YSIS IN THE UNITED STATES AIR FORCE. Joseph E. Marsh, and Raymond E. Christal. Oct 66, 25p Rept no. PRL-TR-66-19

Descriptors: (\*Job analysis, Computers), (\*Automation, Air Force), Air Force personnel, Inventory control, Data processing systems, Computer programs, Reviews, Performance (Human), Management planning, Sampling.

In keeping with present trends toward the automation of personnel information, the Air Force method of job analysis provides for the exploitation of advances in electronic computer technology. Computer capability is applied not only in the analysis of job inventory data but also in the construction, administration, and publication phases of the procedure. During inventory construction the computer is used to prepare alphabetic lists of tentative task statements according to pertinent key words. This grouping by topic facilitates the detection of redundancy and insures the elimina-tion of duplicate statements. In the administration phase, the computer selects the required sample of job incumbents from current personnel rosters maintained on magnetic tape. In addition, the computer prints names and addresses on appropriate labels to attach to inventories for mailing. It is in the area of occupational data analysis, however, that the computer makes its most impressive im-pact. By application of a complex program consistng of over 50,000 instructions, those incumbents in a survey sample who perform essentially the same job are grouped together, and a job description composed of duties and tasks is published for each such job type identified. The computer also lists information available for each case and reports means, standard deviations, and distributions of values for specified variables. Composite job descriptions may also be obtained for any group defined in terms of job-related variables such as grade, specialty, years of experience, or specialized training. (Author)

### AD-656 701

Aerospace Medical Research Labs Wright-Patterson AFB Ohio

ADVANCES IN THE USE OF COMPUTERS FOR HANDLING HUMAN FACTORS TASK DATA, Lawrence E. Reed. Apr 67, 16p Rept no. AMRL-TB-67, 14

Pub. in International Simulation and Training Conference (3rd), New York, 24-27 April 1967. Supported by NASA and Contract F33615-67-C-1036 with the System Development Corp.

Descriptors: (\*Human engineering, \*Data processing systems). (\*Job analysis. Human engineering). Systems engineering. Training, Computers, Analysis, Data, Personnel management.

The purpose of the paper is to review some of the data problems the analyst must deal with in his work and to suggest some possible remedies. A review of the task analysis procedures is followed by a discussion of the uses of task analysis in system development programs. Problems connected with each were used to generate the goals of a research program, which is directed toward

the development of computerized techniques to assist the analyst make better use of available data. (Author)

AD-657 345 Personnel Program Support; Activity Washington D C Personnel Research Lab JOB ANALYSIS: AN ASSESSMENT, OF AP-PLICABILITY OF ANALYSIS SYSTEMS OF OTHER SERVICES TO NAVY ENLISTED BIL-Mark E. Jehnson, Nov 66, 49p Rept no. WRM-67-See also AD-649 555.

Descriptors: (\*Job analysis. Personnel management). (\*Personnel management. Naval personnel). Inventory, Questionnaires. Training. Computers. Information retrieval. Data storage systems. Data processing systems.

As a basis for approaching the development of a Navy job analysis system, the standard procedures in job analysis are analyzed and reviewed, together with recent developments in the field. Limitations upon the research are identified, and some of the underlying assumptions are indicated. Criteria for a Navy job analysis system are proposed. Industrial and governmental practices in job analysis are discussed. parmental practices in joo analysis are discussed, par-ticularly the systems followed by the U.S. Marine Corps, the U.S. Air Force, and the U.S. Army, and their use for Navy purposes is appraised. Procedures followed by the U.S. Department of Labor, are also examined. It is concluded that, while certain aspects of the Air Force and Marine Corps. job analysis systems may pertain to the Navy, a job analysis system which is satisfactory for the Navy must be developed to accommodate the Navy's unique characteristics and require-ments. (Author)

AD-659 287

Naval Personnel Research Activity San Diego

STUDIES IN THE COMPUTERIZATION OF EN-STUDIES IN THE COMPUTERIZATION OF EN-LISTED CLASSIFICATION: I. A HIERARCHY OF CRITERIA FOR COMPUTERIZED CLAS-SIFICATION OF ENLISTED MEN. II. TRAIN-ING COST MINIMIZATION AS A CRITERION FOR PERSONNEL CLASSIFICATION. III. SHORT-TERM FLUCTUATIONS IN CLASS 'A' SCHOOL QUOTAS.

Bernard Rimland, Edward F. Alf, Jr., and Leonard Swanson, Nov 66, 21p Rept no. NPRA-SRM-67-10

Descriptors: (\*Naval personnel. Classification). ('Manpower studies, Computers). Recruiting. Training, Costs, Reduction, Simulation, Money. Performance (Human).

The report consists of three brief papers presenting several aspects of the ongoing research program at the U. S. Naval Personnel Research tivity. San Diego, concerned with computerizing enlisted classification. The first paper provides an overview of planned and alternative approaches to a central issue in computerized classification. nailely; what are the goals the computer will maximize. The second paper presents the mathematics behind one goal currently being investigated-cost reduction, as measured in dollars spent in training. The results of a small scale simulation study are reported. The third paper emphasizes the need for computerization by showing how fluctuations in short 'erm demand can create brief and expensive peric is of 'feast or famine' in the available manpower pool even when the longer-term manpower supp' may be stable and adequate. (Author)

AD-659 322
Assistant Secretary of Defense (Systems Analysis) Washington D C
STATISTICS IN COST PREDICTION PROBLEMS AND POTENTIAL,
Harry Piccariello. 3 Mar 66. 16p Rept no. TP-66-5

Prepared for presentation to DOD Cost Research Symposium March 3, 1966.

Descriptors: (\*Costs, Predictions), (\*Cost effectiveness, Statistical analysis). (\*Aircraft, Cost efdectiveness). Management planning. Aircraft industry. Performance (Engineering). Reliability. Optimization, Sampling, Regression analysis.

The report describes the application of statistical techniques for determining cost estimates (predictors); in particular. (a) why the use of statistics: (b) problems associated with their use; and. (c) some possible approaches which avoid the problems or may lead to a solution of these problems.

AD-661 484 California Univ Los Angeles Western Management Science Inst A SIMULATION STUDY OF LABOR EFFICIEN-CY AND CENTRALIZED LABOR ASSIGNMENT CONTROL IN A PRODUCTION SYSTEM MODEL, Rosser T. Nelson, Sep 67, 30p Rept no. WMSI Working Paper-126 Contract Nonr-233 (73)

Descriptors: (\*Management engineering, \*Industrial research), (\*Labor, Performance (Human)), Models (Simulations), Queueing theory, Job analysis, Operations research, Industrial production. Efficiency. Control.

The paper reports a set of simulation experiments designed to study service systems in which labor interchange is possible among service stations. It is one of a series of studies in which the author has explored design and control aspects of labor and machine limited production (service) systems. The interrelationships among four experimental variables are investigated in terms of resulting system performance statistics. The variables are the job routing structure which describes the flow of work through the service facilities, the queue discipline. the efficiency of labor interservice facilities, the queue discipline, the efficiency of labor in-terchange, and the degree of centralized control exercised in labor assignment. (Author)

AD-662 092 Naval Medical Research Inst Bethesda Md THE INTERACTION OF PERSONALITY AND INTELLIGENCE IN TASK PERFORMANCE, David Kipnis, and Carl Wagner, 1965, 14p Availability: Published in Educational Psychological Measurement v25 n3 p731-44 1965.

Descriptors: (\*Personality. \*Behavior). psychology, Motivation. Performance (Human), Intelligence tests. Personality tests. Aptitude tests. Naval personnel, Predictions.

Prior field studies had found that intelligence moderated the validity of two non-cognitive tests that had been developed to predict the job performance of Navy enlisted men. The first test was an attempt to measure persistence, and the second test was a purported measure of passive-aggressive character structure called the Insolence Scale. The present study tested the hypothesis that task difficulty was the basis for the field study results. From 70 to 140 Navy enlisted men completed three tasks, each of which was varied in task difficulty. Results did not support the hypothesis concerning task difficulty. However, they did yield significant interactions between intelligence, the two tests. and aspects of task performance. The findings then parallel in a lab setting those of the original field studies. Internal analysis suggested that task motivation, rather than task difficulty, may be the basis for the interactions between the persistence test and performance. (Author)

AD-662 104 Naval Medical Research Inst Bethesda Md THE RELATIONSHIP BETWEEN SISTENCE, INSOLENCE, AND PER-PER- FORMANCE, AS A FUNCTION OF GENERAL

ABILITY,
David Kipnis, 1965, 16p
Availability: Published in Educational and Psychological Measurement v25 nl p95-110 1965.

Descriptors: (\*Personality, \*Behavior). Motivation, Stress (Psychology), Social psychology, Performance (Human), Naval personnel, Predictions, Intelligence tests, Personality tests, Aptitude tests.

Two hypotheses were tested: (1) The relationship between persistence, as measured by the Hand Skills Test, and school and job performance is a function of general intelligence. Among lower ability men persistence will be positively related to performance. Among higher ability men per-sistence will not be related to performance. (2) The relationship between the Insolence Scale and school and job performance is a function of general intelligence. Among lower ability men, the Insolence Scale will not be related to performance. Among higher ability men, the Insolence Scale will be negatively related to performance. (Author)

AD-662 671

AD-62 671
University of Southern California Los Angeles
Electronics Personnel Research Group
COMPUTER PERSONNEL SELECTION AND
CRITERION DEVELOPMENT: III. THE COM-PUTER POSITION PROFILE. Technical rept.

Joseph W. Rigney, Raymond M. Berger, and Robert C. Wilson, Nov 67, 43p Rept no. TR-53 Contract Nonr-228 (22) See also AD-636 988.

Descriptors: (\*Computer personnel, Selection). (\*Programming (Computers), \*Job analysis), Programmers. Psychometrics. Factor analysis. Analysis, Standards.

The Computer Position Profile (CPP), was developed as a means of describing and analyzing the important dimensions of computer pro-grammer and analysts positions. The CPP grew out of the job analysis phase of a long range research program concerned with computer personnel selection and evaluation. As the result of a Q-factor analysis of 150 computer positions in a variety of computer installations, common job factors or dimensions were found and interpreted. The dimensions were interpreted on the basis of the kinds of positions defining each dimension and the tasks most often performed in these positions. A scoring key was constructed for each dimension using the 10 highest-weighted tasks and 10 lowestweighted tasks in the analysis as positive and negative weights, respectively. The original 150 positions were rescored with these keys. Congruence coefficients between the dimension scores and the original factor loadings were quite high, indicating that the scoring keys based on 20 items will retain the same dimensional structure. C-score norms were then developed for converting the scores to C-scores on a profile sheet. An application was made of the CPP on a group of computer personnel in a large military systems programming or-ganization. The results of this application of the CPP were consistent with the type of programming activities carried on by the three broad job categories: Systems Analyst. Senior Programmer and Programmer. The CPP is recommended as an economical procedure for measuring some of the dimensions of computer personnel positions for purposes of job description, personnel assign-ment, and training evaluation. (Author)

AD-062 956
System Development Corp Santa Monica Calif
DEVELOPMENT AND MANAGEMENT OF A
COMPUTER-CENTERED DATA BASE: PART 4:
A COMPUTER-CENTERED DATA BASE SERV-ING USAF PERSONNEL MANAGERS. Technical memo...

A. Kenneth Swanson. 8 Nov 63, 24p Rept no. TM-1456/004/00



See also Part 3, AD-662 958. Proceedings of the Symposium, 10011 June 1963, conducted by the Command Systems Department's ARPA Command Research Project, in cooperation with the Advanced Research Projects Agency.

Descriptors: (\*Personnel management, Data processing systems). Computers. Efficiency. Manpower studies, Decision making. Systems engineering, Command + control systems, Air force personnel, Symposia.

The paper discusses the use of computers to assist in the management of personnel. It describes guidelines for system development, an overview of the total process, and the effective use of a data base. Long-range needs are considered and some conclusions are drawn as to the application of a data base to the important area of personnel.

#### AD-663 135

Naval Personnel Research Activity San Diego

NEW TECHNIQUES IN TASK ANALYSIS. Research memo

Joe Silverman, Nov 67, 27p Rept no. NPRA-SRM-68-12

Descriptors: (\*Job analysis, Naval personnel), Classification, Numerical analysis, Personnel management, Applied psychology, Learning, Per-

The research is directed toward the investigation of recent developments in techniques of task analysis. Because of methodological problems associated with the development of training curricula. the analysis of man-machine systems, and occupational analysis, it has been proposed that a task taxonomy be developed. Such a taxonomy would indicate the inherent similarities between tasks, independent of their environment, and pave the way for improvements in training, billet structure developments, and improved manpower utilization. There have been numerous attempts at developing task taxonomies -- both quantitative and qualitative. At present, the results of these efforts have not been comprehensive enough, nor suitable for use throughout the Navy. Because of recent developments in other sciences, a small effort was devoted to investigation of the possible application of these new techniques to personnel systems problems in the Navy. Problems of task classification can be approached more systematically through methods of numerical taxonomy than through traditional techniques. Numerical taxono-my places the procedures of task comparison and classification on an operational and quantitative basis. This makes it possible for the Navy to ob-jectively and precisely evaluate its billet and rating structure. Since this research was initiated a short time ago, with a modest budget, the primary effort has been devoted to an investigation of the stateof-the-art. As a result of this initial inquiry, it is concluded that the application of techniques of numerical taxonomy to problems of task analysis is warranted because of its usefulness in helping to solve problems relating to the Navy's personnel systems. (Author)

### AD-663 315

Personnel Research Lab Lackland AFB Tex OCCUPATIONAL SURVEY OF THE MEDICAL MATERIEL CAREER LADDER 915X0, Joseph E. Morsh, Wayne B. Archer, and Harry M. Kudrick. Sep 67, 536p Rept no. PRL-TR-67-9-(1) See also Report no. 2, AD-663 316.

Descriptors: (\*Medical personnel, Air Force). Statistical data. Aviation medicine Air Force Systems Command. Identifiers: Computer printouts,

Personnel Research Lab Luckland AFB Tex

OCCUPATIONAL SURVEY OF THE MEDICAL MATERIAL CAREER LADDER 915X0,
Joseph E. Morsh. Wayne B. Archer. and Harry M.
Kudrick. Sep 67, 526p Rept no. PRL-TR-67-9- (2)
See also Report no. 1, AD-663 315.

Descriptors: (\*Medical personnel. Air Force). Statistical data. Aviation medicine. Air Force Systems Command.
Identifiers: Computer printouts.

## AD-663 633

Naval Submarine Base New London Conn VISION ACUITY: THE PROFESSIONAL VS. THE NON-PROFESSIONAL EXAMINER. Memorandum rent...

Ira Schwartz. 10 Dec 57, 7p Rept no. SBNL-Memo-57-10

Descriptors: (\*Medical personnel. Performance (Human)). (\*Visual acuity. Medical examination), Professional personnel, Tests.

In an establishment where acuity screening tests must be given to a large number of entering can-didates, it becomes necessary to use non-professional personnel trained specifically to administer acuity tests. In an investigation of the dependability of such non-professional testing, a group of test results for 159 eyes obtained on the one hand by a professional optometrist and on the other by a hospital corpsman\_were\_compared\_and it was found that the non-professional examiner scored forty percent of the acuities the same as the professional examiner, fifty per cent better by at least one line of the test, and ten per cent poorer. There is discussion of possible bases for the dif-ference in this particular test situation. (Author)

Personnel Research Lab Lackland AFB Tex
PROCEDURAL GUIDE FOR CONDUCTING
OCCUPATIONAL SURVEYS IN THE UNITED
STATES AIR FORCE,
Joseph E. Morsh, and Wayne B. Archer. Sep 67.

72p Rept no. PRL-TR-67-11

Descriptors: (\*Job analysis, Air Force), Instruction manuals. Data processing systems. Military organizations. Sampling. Air force personnel, Military requirements. Air force training. Manpower studies. Group dynamics. Identifiers: Military careers.

The procedural guide sets forth in detail the procedures for collecting, organizing, analyzing. and reporting information describing work performed by Air Force officers and airmen. Specific steps in the application of the Air Force method of job analysis are presented in chronological order. The guide has been designed to (a) provide guidance to Air Force and other agencies who propose to construct and administer job invento-, (b) assemble information about the Air Force method of job analysis which is now available only from scattered sources. (c) indicate problems found in applying the Air Force method and suggest possible solutions, (d) summarize hitherto un-reported experiences gained during occupational surveys. (e) acquaint using agencies with the products of occupational surveys, and (f) provide briefing material where summary information about the Air Force method is required. (Author)

### AD-664 501

Carnegie-Mellon Univ Pittsburgh Pa Management Sciences Research Group
A GOAL PROGRAMMING MODEL FOR MAN-POWER PLANNING.

Management sciences research rept., A. Charnes, W. W. Cooper, and R. J. Niehaus, 5 Dec 67, 26p Rept no. MSRR-115 Contracts Nonr-760 (24), DA-31-124-ARO (D)-322

Descriptors: (\*Manpower studies. Management planning). (\*Personnel management, Mathematical models). Civilian personnel, Budgets, Linear programming. Statistical processes, Navy.

goal programming model is formulated for guiding and controlling manpower planning at the level of the Office of Civilian Manpower Management of the U. S. Navy. Markov elements are used to trace through the effects of initial and subsequent personal commitments and budgeting constraints. personnel ceilings, etc., form parts of the total (Multi-dimensional) goals considered. Further extensions will include training, environmental fac-tors, etc., after clarification is secured concerning the pertinence of such a line of development.
(Author)

System Development Corp Santa Monica Calif PERSONNEL RESEARCH IN SDC: REPORTS AND PAPERS,

Joyce C. Mansfield. 1 Apr 66, 14p Rept no. TM-

Descriptors: (\*Personnel management, Bibliographies), (\*Laboratories, Personnel management). Research program administration. Scientific research. Computer personnel, Training, Selection. Performance (Human), Sex. Scientific personnel, Professional personnel.

Describes the personnel research program in SDC. Reports and papers resulting from the program are listed according to the SDC document series in which they appear. (Author)

#### AD-665 669

Naval Personnel Research Activity San Diego

THE SAMOA METHOD OF DETERMINING TECHNICAL, ORGANIZATIONAL AND COM-MUNICATIONAL DIMENSIONS OF TASK CLUSTERS

Malcolm J. Carr. Nov 67, 43p Rept no. NPRA-STB-68-5

Descriptors: (\*Naval personnel, Classification), (\*Job analysis, Computer programs). Questionnaires, Standardization, Personnel management, Leadership.

Identifiers: \*Multidimensional occupational analy-

The report describes a pilot study of a research method for collecting and analyzing occupational information to be used as a major input for the development of an occupational classification structure suitable for the next decade. This ap-proach is termed the SAMOA method (Systematic Approach to Multidimensional Occupational Analysis). The pilot study demonstrates the technical feasibility of the method for determining current work requirements. The rationale upon which the research was based is that (a) the en-listed occupational classification structure must be based upon valid work requirements; (b) current methods for determining work requirements on a large scale are too slow, too subjective, and limited primarily to the technical dimensions of work; and, therefore, (c) development of improved procedures for determining work requirements is a necessity. The SAMOA method consists of two major phases: (1) Specification of specialty areas by means of a computerized clustering program which identifies relatively homogeneous work groups on the basis of similarity of task pat-terns; and (2) stratifying such groups (clusters) on the basis of Technical, Organizational, and Communicational variables by means of a set of computerized procedures. Indices of these variables form the basis for cluster profiles which constitute the primary input for an occupational classifica-tion structure. (Author)

## AD-666 978

Naval Personnel Research Activity San Diego



A STANDARDIZED TASK FORMAT FOR PER-SONNEL - REQUIREMENTS INFORMATION SYSTEM METHODOLOGY (PRISM).

Preliminary rept.. Gordon M. Campbell. Mar 68, 44p Rept no. NPRA-SRM-68-17

Descriptors: (\*Personnel management. Data processing systems). Naval personnel. Human engineering. Man machine systems. Military requirements, Job analysis, Information retrieval. Man-

Identifiers: \*Personnel requirements information system methodology.

The report documents the development of a standardized task format designed to include all of the detailed information necessary for the development, analysis, and utilization of complete Navy personnel manning and training requirements in-formation. An information structure developed at the Aerospace Medical Research Laboratories (AMRL) was utilized as a focal point for this phase of research. The AMRL task format was modified to make it more responsive to Navy requirements.

AD-667 466

Navy Medical Neuropsychiatric Research Unit

San Diego Calif PREDICTING PREDICTING THE ACADEMIC PER-FORMANCE OF NAVY HOSPITAL CORP-

Laverne C. Johnson, Jo Ann Pollard, and John A. Plag, 1967, 13p Rept no. 67-29

Descriptors: (\*!:ledical personnel, Selection), Naval training, Psychometrics, Naval personnel. Classification, Mathematical prediction, Correlation techniques.

The study-served as a pilot investigation of the validity of cognitive and non-cognitive variables for predicting academic achievement among Navy Hospital Corps School students. For a sample of 126 corpsmen, who were considered to be representative of 2500 students attending Corps School. San Diego, between June and December 1966. three variables were identified as being uniquely predictive of academic performance. Age, level of civilian education, and General Classification Test score were found to yield a multiple correlation of .65 with the criterion. This validity represents a substantial improvement over the current selection standard which utilizes only cognitive measures of ability. Scores on the Cornell Medical Index and MMPI were not significantly related to course average. (Author)

AD-667 738 Naval Personnel Program Support Activity Washington D C Personnel Research Lab MEDICAL COST REPORTING: AN ANALYSIS. Final rept., Joseph L. Taylor. Dec 67, 45p Rept no. WRM-68-

Descriptors. (\*Military medicine. Costs). Armed forces budgets. Naval personnel. Medical personnel. Training, Hospitals, Medical equipment.

The purpose of this report is to identify and evaluate the problem areas associated with the determination of medical costs as incurred by the Department of the Navy for its military personnel. To establish a valid medical cost, individual training cost studies should be completed for HM's, DT's. Medical Corps. Dental Corps, Nurse Corps, Medical Service Corps. and the Chaplain Corps. Currently ten management bureaus are involved with the distribution of funds for Naval Medical Activities. The Bureau of Medicine and Surgery funds a portion of the complete medical budget, and it is this figure which is used in the computation of a per man per year medical cost. A close examination of the current medical accounting system should be undertaken to determine the economic feasibility of establishing one central medical cost reporting agency. This would provide a complete cost of medical services which could then be combined with the training costs and prorated on a per man per year basis to arrive at a more valid annual cost. Until this has been accomplished, it is recommended that the medical cost as currently reported by the Bureau of Medicine and Surgery be utilized. (Author)

AD-668 287

Walter Reed Army Inst of Research Washington D

I CAME, I SAW, I RESPONDED: NURSING OB-SERVATION AND ACTION SURVEY, Phyllis J. Verhonick, Glennadee A. Nichols. Beverly A. K. Glor, and Rosemary T. McCarthy.

Availability: Published in Nursing Research, v17 nl pl-7 Jan-Feb 1968.

Descriptors: (\*Manpower studies, Nurses), (\*Nurses, Reaction (Psychology)). Training films. Simulation, Medical research. Performance (Human), Analysis, Data processing systems, Professional personnel, Motivation, Collecting methods. Statistical processes.

The purpose of the observation and action study was to examine the responses of a large and diverse sample of professional nurses to filmed patient situations. (Author)

AD-671 106

Personnel Research Lab Lackland AFB Tex OCCUPATIONAL SURVEY OF THE PREVEN-TIVE MEDICINE CAREER LADDER 907X0. VOLUME I.

Joseph E. Morsh, Robert W. Nall, and Harry M. Kudrick. Feb 68, 454p Rept no. PRL-TR-68-1-Vol-

See also Volume 2, AD-671 107.

Descriptors: ( Medical personnel. Job analysis), Classification, Air force personnel, Air force training. Distribution. Identifiers: Computer printouts.

A job inventory covering four specialties in the Preventive Medicine Career Ladder, and consisting of 275 tasks grouped under 16 duty categories. was administered to 381 airmen in 14 major air commands. Incumbents of all skill levels completed a background information section and rated on a 7-point scale relative time spent on tasks. The airmen also indicated on a 7-point scale amount of work experience on each task compared with other tasks performed. Job descriptions are presented for 32 groups selected according to background information variables. Included are 8 specialty groups, 10 groups with differing lengths of military service, 6 groups with differing job in-terests, 2 groups differing in directed duty assignment, 2 groups defined according to assignment inside or outside CONUS. 2 groups having had specific technical courses, and 2 groups without these courses. Job descriptions are also presented for the Preventive Medicine Career Ladder total sample and for 17 significant job types identified by the automated job clustering program. A group overlap matrix shows the similarity of groups in terms of time spent on tasks. Summary tables indicate the percentage of members in each group who perform each task. Group difference descriptions are given for selected groups. Distributions of background variables for the total sample and for the 32 specialty groups are also shown. (Author)

AD-671 107

Personnel Research Lab Lackland AFB Tex OCCUPATIONAL SURVEY OF THE PREVEN-TIVE MEDICINE CAREER LADDER 907X0. VOLUME II. Technical rept..

Joseph E. Morsh, Robert W. Nall, and Harry M. Kudrick, Feb 68, 316p Rept no. PRL-TR-68-1-Vol-

See also Volume 3, AD-671 108.

Descriptors: (\*Medical personnel. \*Job analysis). Classification. Air force personnel. Air force training. Distribution. Identifiers: Computer printouts.

AD-671 108

Personnel Research Lab Lackland AFB Tex OCCUPATIONAL SURVEY OF THE PREVEN-TIVE MEDICINE CAREER LADDER 907XO. VOLUME III. Technical rept.

Joseph E. Morsh, Robert W. Nall, and Harry M. Kudrick. Feb 68, 461p Rept no. PRL-TR-68-1-Vol-

See also Volume 1, AD-671 106.

Descriptors: (\*Medical personnel. \*Job analysis). Classification, Air force personnel, Air force training, Distribution. Identifiers: Computer printouts.

AD-672 957

Personnel Research Lab., Lackland AFB. Tex. DEVELOPMENT, SELECTION, AND VALIDA-TION OF FACTORS FOR THE EVALUATION OF AIRMAN JOBS; Joe T. Hazel: Aug 67, 75p Rept. no. PRL-TR-67-14

Descriptors: (\*Air force personnel, \*Job analysis), Factor analysis, Selection. Regression analysis, Wages, Reliability Identifiers: Evaluation.

The purpose of the study was to develop, select, and validate efficient and reliable sets of factors and wieghts for use in evaluating airman jobs. A representative sample of 200 incumbent-prepared airman job descriptions served as the criterion sample evaluated by senior NCOs, lieutenants, captains, and field-grade officers with respect to merited grade. merited pay, and 15 job requirement factors designed specifically for airman jobs. Various combinations of 37 predictor variables, including the 15 factors, were considered in-1,296 regression analyses (480 reported) made to derive and validate optimally weighted grade and pay policy equations. The grade policy equation, which involved eight variables, accurately predicted the grades awarded jobs in the criterion sample by the raters. The pay policy equation, which consisted of the same eight variables and one other, also accurately predicted raters: judgments of pay. Subsequent analyses with weights developed and cross-applied in 100-job subsamples indicated that both policy equations were very stable. Comparison of the overall-group grade policy equation with grade policy equations developed for each of the four rater groups which provided criterion and factor ratings revealed no important differences. The predictive efficiency of the policy equations and of all predictor combinations investigated was about the same for the four rater groups. (Author)

AD-673 085 HRB-Singer Inc., State College. Pa. A PROJECTIVE TECHNIQUE FOR THE MEASUREMENT OF PATIENT ATTITUDES ON HOSPITAL WARDS. Final rept.,

Paul S. Francis, and Daniel J. Peterman, Jul 68. 40p\* Rept. no. HRB-4143.11 (Task 5)-F-31 Contract N00014-67-C-0501

Descriptors: (\*Medical personnel, Training), (\*Projective techniques, Attitudes). Psychometrics. Attitudes, Questionnaires, Responses, Research program administration, Test construction (Psychology). Nurses, Medical technicians. Identifiers: \*Patients.



A projective technique to be used in conjunction with several other assessment devices in evaluating the Ward Manager program in Naval Hospitals was developed. The sentence completion method was selected as the technique of choice. The senantic differential scale was included as a check on the validity of the scoring system. The techniques were assembled and administered as a pilot-test effort to 75 patients. 61 of whom produced scorable protocols. No major problems were encountered in the pilot testing. The correlations of the two instruments used in this pilot testing seem to relate to one another to acceptable degree. This not only supports the validity of the sentence completion scale, but it also extends the use of the total technique. (Author)

AD-673 086

JOB RESTRUCTURING WITHIN THE NAVY HOSPITAL CORPSMAN RATING: A FEASI-BILITY STUDY.

Robert T. Root, Paul S. Francis, and Thomas E. Ray, Jul 68, 64p\* Rept no. HRB-4143.11 (Task 6)-F-31

Contract N00014-67-C-0501

Descriptors: (\*Personnel management, Hospitals), (\*Job analysis, Naval personnel), Manpower studies, Achievement tests, Performance (Human), Intelligence tests, Correlation techniques, Labor, Distribution, Selection, Specifications, Classification, Feasibility studies, Collecting methods, Data processing systems; Sampling, Identification, Retention.

Identifiers: Job restructuring, \*Hospital corp-

Two different but converging avenues of study were used in the investigation of lower mental level personnel, i.e., personnel who scored in the 10th to 30th percentiles on the armed services qualification. test: One studied the relative performance of lower mental level personnel presently in the hospital corps. The other was directed toward the identification of tasks and task clusters for possible job restructuring to permit the effective utilization of lower mental level personnel. (Author)

### AD-674 593

TR-68-310

Electronic Systems Div L G Hanscom Field Mass THE UNITED STATES AIR FORCE HOSPITAL SYSTEM, Ronald A. Creamer. Aug 68, 21 p Rept no. ESD-

Descriptors: (\*Hospitals, Data processing\* systems), (\*Information retrieval, \*Military medicine), Computers. Satellites (Artificial), Diagrams. Records, Epidemiology, Diagnosis, Communicable diseases, Medical research. Psychology, Monitors, Instrumentation, Management planning, Disasters, Rehabilitation.

The paper describes in general terms a concept for introducing computers to all USAF medical facilities. It defines in depth the functions, applications and growth potential which can accrue within the USAF Hospital System. It also describes additional benefits possible on a regional and worldwide basis which could evolve from connecting the hospitals to a communication network. Research potentials of the system are also projected. (Author)

AD-674 968

Personnel Research Lab Lackland AFB Tex QUANTITATIVE DIFFERENTIATION JOBS,

Joseph E. Morsh. 1968, 2p Availability: Pub. in Proceedings, 76th Annual Convention, APA, p639-640 1968. Descriptors: (\*Job analysis, Statistical processes), Questionnaires, Sampling, Statistical data, Classification, Programming (Computers), Identification, Inventory, Manpower studies, Personnel management, Research program administration. Identifiers: Comparative studies.

The composite group job description can be derived for any group that can be defined in terms of background variables. Such consolidated group job descriptions are routinely generated for skill-level groups and for groups designated by length of service. The computer printout of the group job description identifies the career ladder surveyed and also shows sample size, number of tasks and duties in the inventory, and the number of members in the group described. The job description proper shows the percentage of group members performing each task, the average percentage of work time spent by members of the group who perform the task, and the average percentage of work time on each task distributed across all group members. The tasks are arranged in descending order of these latter values. (Author)

AD-675 295

Personnel Research Lab Lackland AFB Tex
JAN: A TECHNIQUE FOR ANALYZING
GROUP JUDGMENT,

Raymond E. Christal. 1968, 4p

Availability: Pub. in Jnl. of Experimental Education, v36 n4 p24-27 1968.

Descriptors: (\*Personnel management; Decision making), (\*Performance tests, Analysis), Professional personnel; Group dynamics, Accuracy, Statistical processes, Test methods, Test equipment; Education:

Identifiers: Rating scales, Group judgment, Weighting systems, JAN (Judgment analysis), Judges.

This paper indicates how a technique which groups criteria in terms of the homogeniety of their associated prediction equations can be used to identify and describe the rating policies within a group or board of judges. (Author)

AD-675 492

HRB-Singer Inc State College Pa EVALUATION OF THE BASIC HOSPITAL CORPS SCHOOL. Final rept. (Tasks 1-IV),

James M. Judisch, Richard B. Cooper, Paul S. Francis, and TI omas E. Ray. Jul 68; 112p\* Rept no. HRB-4143 (Tasks 1-4)-F-31 Contract N00014-67-C-0501

Descriptors: (\*Medical personnel, Training), (\*Programmed instruction, Naval personnel), Hospitals, Job analysis, Retention, Questionnaires. Performance (Human), Statistical distributions, Responses, Instructors, Nurses, Attitudes, Classification, Tables.

Identifiers: Evaluation, Curricula, Hospital corps schools.

Two major areas were investigated: (1) The nature of the present curricula at the two schools and (2) the nature of the job requirements expected of newly graduated Corpsmen at their first duty station. The development and construction of four instruments and the analysis and description of the present curriculum was accomplished. The curriculum analysis consisted of a topic by topic analysis of the individual Corps school curricula and a summarization of major discrepancies. The survey was an integral part of the retention examination and was designed to determine where student and graduate Corpsmen gained retention item information. The task scale was composed of a list of the tasks that comprised the job which the Junior Corpsman performed at his first duty station. The questionnaires asked for responses primarily of a demographic and attitudinal nature. (Author)

AD-675 900

Defense Documentation Center Alexandria Va COST EFFECTIVENESS ANALYSIS. VOLUME I. Bibliography.

Aug 68, 225p Rept no. DDC-TAS-68-14

Descriptors: (\*Cost effectiveness, \*Bibliographies), (\*Value engineering, Management planning), Systems engineering, Management engineering, Decision making, Research program administration, Mathematical models, Quality control, Costs, Economics, Reliability, Procurement, Data processing systems, Programming (Computers), Transportation, Logistics, Inventory control, Communication systems, Air traffic control systems, Advanced planning, Defense systems. Identifiers: Systems analysis, Cost estimates, Tradeoffe.

The bibliography consists of references on Cost Effectiveness Analysis and Cost references related to cost estimation and evaluation, cost effectiveness, cost analysis and methodology in research and development, management, decision making and systems value engineering. This volume represents a collection of 160 Unclassified-Unlimited references in the DDC data bank that have been cataloged since 1967. (Author)

AD-676 005

Aerospace Medical Div Brooks AFB Tex HOSPITAL INFORMATION SYSTEM FEASI-BILITY STUDY,

William S. Beck, and Ronald A. Creamer. Aug 68, 60p\* Rept no. AMD-TR-68-2
Prepared in cooperation with Electronic Systems Div., L. G. Hanscom Field, Mass.

Descriptors: (\*Information retrieval, Hospitals). (\*Military medicine, Information retrieval), Feasibility studies; Data processing systems, Programming (Computers), Systems engineering, Cost effectiveness, Subroutines, Dentistry, Medical personnel; Pathology, Radiotherapy, Psychiatry, Surgery, Birth, Pharmacology, Food, Management engineering.

In recognition of the complexity in the basic operation of hospitals today and the shortage of skilled personnel within the medical services a feasibility study has been initiated for developing a medical information system by computer operation using the systems engineering approach. This report outlines the developmental program for a transactional hospital information system which would include all Air Force medical installations and related medical activities. (Author)

AD-676 284

Yale Univ New Haven Conn Dept of Administrative Sciences

TOWARD UNDERSTANDING THE ROLE OF TASKS IN BEHAVIORAL RESEARCH, J. Richard Hackman. Aug 68, 59p AFOSR-68-1678 Grant AF-AFOSR-1600-68

Descriptors: (\*Job analysis, Psychometrics), (\*Behavior, Correlation techniques), Scientific research, Performance (Human), Feasibility studies, Standards, Test construction (Psychology), Reliability, Stress (Psychology). Identifiers: Task evaluation.

This paper attempts to lay the ground work for furthering our understanding of the differences among tasks and the ways in which tasks influence behavior. Three general 'problem areas' are reviewed and evaluated in the paper: (a) problems in defining the concept 'task'—i.e., what are the components and characteristics of an adequate task definition; (b) problems relevant to the description of tasks—i.e., what are the most useful and appropriate bases for making task descriptions and comparisons; and (c) problems relevant to understanding task effects—i.e., how do task factors

make differences in the ways people think and act. After evaluating several issues relevant to the problems of task definition and description, one working definition of the concept is proposed, and one general approach to task description is suggested as likely to be most useful in understanding the behavioral impact of tasks. Finally, a framework proposed which outlines the diversity of effects which may be attributable to task factors in a performance situation, and suggests how these effects may be conceptualized and related. (Author)

AD-676 965
Rand Corp Santa Monica Calif
MEDICAL CARE COST INCENTIVES: SOME
QUESTIONS AND APPROACHES FOR
RESEARCH,
Irving Leveson. Sep 68, 22p Rept no. P-3931

Descriptors: (\*Public health, Federal budgets), (\*Federal budgets, Cost effectiveness), Medical research, Money, Systems engineering, Personnel management, Hospitals, Motivation, Decision making: Costs. Identifiers: \*Medicare, Medicaid.

This paper has attempted to raise questions about the range of alternative cost incentive systems and the information needed to develop them. Where possible, the ways research can make a contribution to the development of reimbursement policies have been illustrated with concrete examples. It is hoped that in the future much current speculation can be resolved through processes firmly grounded in research. (Author)

AD-677-479
Technomics Inc Santa Monica Calif
REQUIREMENT SPECIFICATIONS FOR A
DESIGN AND VERIFICATION UNIT.
Final rept. 15 May-15 Oct 68,
Warren G. Pelton, Burton R. Wolin, Malcolm C.
MacMillan, and T. David Ainsworth. Oct 68, 247p
Rept. no. T-110-68
Contract N00014-68-C-0470

Descriptors: (\*Medical personnel. \*Training), (\*Programmed instruction. Computers), Naval personnel, Military requirements, Specifications, Design, Education, Dental personnel, Nurses, Medical technicians, Costs.
ldentifiers: Computer aided instruction.

A research and development activity to introduce new and improved education and training technology into Bureau of Medicine and Surgery training is recommended. The activity, called a Design and Verification Unit, would be administered by the Education and Training Sciences Department. Initial research and development are centered on the application of multimedia instructional packages; self-contained learning materials and their associated devices, designed using programmed learning principles. A second stage of activities for the unit introduces research and development in the use of computers for computer-managed training and computer-assisted learning. Suggested schedules, activities, and milestones are presented. (Author)

AD-677 593
Aerospace Medical Div Brooks AFB Tex
AUTOMATION FOR THE HOSPITAL OF
TOMORROW.
Thesis,
William Stanislaus Beck. 1 Apr 68, 68p Rept no.
AMD-TR-68-3

Descriptors: (\*Hospitals, Automation), Data processing systems, Information retrieval, Programming (Computers), Management engineering, Medical personnel, Diagnosis, Computer storage devices, Computer personnel, Advanced planning. With the increasing emphasis on automation and shortage of skilled personnel within the medical service of the United States Air Force, the necessity for developing a mechanized system to assist in hospital and medical management became apparent. As Project Engineer for developing a medical information system by computer operation, the author has researched literature, visited hospitals with computers, talked with computer hardware salesmen, and attended meetings and seminars on computer usage. This paper is an attempt to familiarize others interested in computer application for hospitals and the medical fields with my research. (Author)

Naval Personnel Research Activity San Diego Calif A PROCEDURAL GUIDE TO AN AUTOMATIC DATA PROCESSING METHOD OF TASK ANALYSIS DIAGRAMMING.

AD-677 794

Final rept., David A. Wilson. Aug 68; 41 p\* Rept no. NPRA-SRM-69-3 See also AD-660 002.

See also AD-660 002.

Descriptors: (\*Job analysis, Data processing

Descriptors: (\*Job analysis, Data processing systems, Systems engineering, Naval personnel, Diagrams, Man-machine systems, Programming (Computers), Sequences, Instruction manuals.

This project is directed toward the application of automatic data processing (ADP) techniques to the construction and revision of task analysis diagrams during the planning and design stages of system development. This report contains detailed guidance to personnel analysts in producing and updating task analysis diagrams by a new ADP method developed in 1967 and reported in Research Memorandum SRM 68-8. The diagrams may be used by personnel responsible for system design, equipment design, work design, the determination of manning and training requirements, and the preparation of training curricula and materials, maintenance manuals, training aids (including films); and job aids. (Author)

AD-677 981
George Washington Univ Alexandria Va Human
Resources Research Office
RESEARCH IMPLEMENTATION AS AFFECTED BY ARMY STAFFING FUNCTIONS
AND OPERATIONS,
John F, Hayes. Oct 68, 17p Rept no. HUMRRO
professional paper 34-68
Contract DA-44-188-ARO-2

Descriptors: (\*Officer personnel, \*Military organizations), Selection, Job analysis, Supervisory personnel, Professional personnel, Army, Management planning, Decision making.

Army staffing factors are described with reference to activities concerning plans and products of research and development. The operational characteristics and procedures are presinent in terms of information and guidance for research personnel concerned with research planning, execution, and implementation. (Author)

AD-678 347
Naval Personnel Research Activity San Diego
Calif
CATALOG OF PERSONNEL COST DEFINITIONS AND CONCEPTS FOR THE DERIVATION OF MAN/MACHINE FUNCTION ALLOCATION FORMULAE.
Final rept.,
Marilee N. Connelly. Oct 68, 49p\* Rept no.
NPRA-SRM-69-8

Descriptors: (\*Personnel management, \*Cost effectiveness), Man-machine systems, Handbooks, Costs, Statistical data, Substitutes, Numerical methods and procedures, Job analysis, Attrition, Models (Simulations), Information retrieval,

Wages, Programming (Computers), Reliability, Uncertainty, Training, Probability, Symbols, Bibliographies. Identifiers: Definitions, Criteria, Objectives, Trade offs.

This project is directed toward the development of a personnel cost/effectiveness methodology for use in man/machine function primarily during the early stages of equipment system design. The specific purpose of this report is to define and to present a catalog of cost, personnel, and function allocation concepts which are relevant to the development of the cost analysis parameters for man/machine function allocation. (Author)

AD-681 115
Rand Corp Santa Monica Calif
A MODEL OF PHYSICIAN PRICING,
Joseph P. Newhouse, Jan 69, 17p Rept no. P-4011

Descriptors: (\*Medicine, Costs), (\*Costs, Mathematical models), Medical personnel, Economics. Tables. Identifiers: Medical services, Physicians, Demand (Economics). Supply (Economics), Monopoly,

Competition.

It is not clear whether the market for physician services can be better characterized as monopolistic or competitive. This paper attempts to shed some light upon that question. The tests are based upon inferences from two alternative models of the market for physician services. The first model is that of a monopoly, and is the model which the foregoing discussion of the market leads us to formulate. In the second model price is set by the intersection of supply and demand curves, as in a competitive market. (Author)

AD-681 137
Air Force Human Resources Lab Wright-Patterson AFB Ohio
TECHNIQUES-FOR-DEVELOPING SYSTEMS
TO FIT MANPOWER RESOURCES.
Final rept..
Melvin T. Snyder, and William B. Askren. Oct 68,
20p AFHRL-Tk-68-12
Presented at the Army Human Factors Research
and Development Conference (14th).

Descriptors: (\*Personnel management, Systems engineering), Military requirements, Manpower, Military personnel, Logistics, Specifications, Data processing systems, Queueing theory. Identifiers: Tradeoffs.

The report discusses four related processes for developing systems within manning and skills constraints. The point is made that the services are beginning to feel the need to exert some measure of control over system design where human resources are involved. The report covers: (1) Research to prove that certain human resources data, such as manning and skills data, when used as design constraints along with other constraints does affect system design; (2) techniques by which to match or balance through tradeoff practices the hardware, the human and other system support or logistic functions in order to get a best mix de-pending on the real world operational goals; (3) a new specification by which personnel requirements are stated in terms of system requirements, for integrating more fully the human requirements with the system engineering processes; (4) a newly developed computer based data handling system for human resources data in the conception, development, test and operation of systems. The new data handling system is also an integrator of human and hardware data within and across systems, and a mechanism for comparing field performance data with early design data. (Author)

AD-681 509 Purdue Univ Lafayette Ind Dept of Psychology



JOB INVENTORY INFORMATION: TASK AND SCALE RELIABILITIES AND SCALE INTER-RELATIONSHIPS. Rept. for Mar 62-Oct 64, John R. Cragun, and Ernest J. McCormick. Nov 67, 55p PRL-TR-67-15 Contract AF 41 (609)-1604

Descriptors: (\*Job analysis, Reliability), Inventory, Scale, Régression analysis, Correlation techniques, Management planning, Reaction (Psychology), Interactions, Questionnaires, Tables.
Identifiers: Rating scales, Comparison.

Officer job incumbents in three utilization fields were surveyed with job inventories to determine the reliability of task information and the reliabili-ty of five different rating scales used to rate tasks erformed, the relationships between the five rating scales, and incumbent reactions to the inventories and the scales. Inventories were administered twice to the same job incumbents at a four-month interval. Each inventory included one of five rating scales on the basis of which job incumbents reported additional information about the tasks performed. These: scales were time-spent, importance, part-of-the-position: difficulty and method-of-learning. Some incumbents received the same scale for the second administration, and others received a different scale. Questions pertaining to the adequacy of the inventory and the rating scale were also answered. Task, duty; and overall reliabilities were obtained on both the inventories and the scales, and correlations were computed for various scale combinations. A regression analysis was used to identify variance components of the part-of-the-position scale. Several major conclusions were drawn on the basis of the results of these procedures. (Author)

AD-682 490
Purdue Univ Lafayette Ind Occupational Research Center
THE RATED ATTRIBUTE REQUIREMENTS OF JOB ELEMENTS IN THE POSITION ANALYSIS QUESTIONNAIRE,
Robert C. Mecham, and Ernest J. McCormick. Jan 69, 369 Rept no. 1
Control Non 10, 20 (28)
PORTI INS 107 THIS DOCUMENT ARE ILLEGIBLE. DEE INTRODUCTION SECTION OF THIS ANNOUNCEMENT JOURNAL FOR CFSTI ORDERING INSTRUCTIONS.

Descriptors: (\*Performance (Human), Predictions), (\*Job analysis, Effectiveness), Questionnaires, Personnel management, Reliability, Standardization, Selection, Personality, Physical fitness. Statistical processes, Naval research. Identifiers: Evaluation.

The report describes one phase of a research program which is, in part, directed toward synthetically establishing job requirements by the use of a structured job analysis format and the rated attribute requirements of each of the job elements comprising the format. The phase described in this report involved: (1) the selection of human attributes relevant to job performance: (2) the obtaining of ratings of the relevance of those attributes to the job elements of the position analysis questionnaire: (3) the analysis of the reliability of such ratings; and (4) the derivation of attribute requirements profiles for the individual job elements on the basis of several sets of ratings. (Author)

AD-682 499
Rand Corp Santa Monica Calif
TOWARD A THEORY OF NON-PROFIT INSTITUTIONS: AN ECONOMIC MODEL OF A
HOSPITAL,
Joseph P. Newhouse. Jan 69, 23p Rept no. P-4022

Descriptors: (\*Hospitals, Mathematical models), Theory, Economics, Costs, Efficiency, Management engineering, Optimization, Cost effectiveness, Decision making, Employment, Medical personnel, Quality control. Identifiers: Nonprofit institutions.

A simple model of a hospital is developed, and its implications are considered. An attempt is made to justify the realism of the model, although it cannot be entirely realistic. To develop the model the assumption is made that hospital expenses are financed by the patient and not by a third party. Thus the model may prove applicable to other non-profit institutions where third party payments are not important, such as colleges and universities, the performing arts, and museums. (Author)

AD-683 019
George Washington Univ Alexandria Va Human
Resources Research Office
USE OF JOB AND TASK ANALYSIS IN TRAINING.
Professional paper.

Jan 69, 44p\* Rept no. HUMRRO professional paper-1-69 Contract DA-44-188-ARO-2 Presented at Headquarters, U. S. Continental Army Command, Fort Monroe, Va. October 1968.

Descriptors: (\*Job analysis, \*Military training), Effectiveness, Human engineering, Research program administration, Systems-engineering, Standards, Classification, Numerical-analysis, Programming (Computers), Modification kits, Optimization, Test methods, Handbooks, Questionnaires.

Identifiers: Task analysis, Objectives, Concepts.

The paper records four presentations on the 'use of job and task analysis in training' which specifically describe job and task analysis and its role in curriculum engineering. The briefing was designated the first of a series of briefings on training research and development programs of the U.S. Army Behavioral Science Research Laboratory, the Center for Research in Social Systems, and HumRRO. (Author)

AD-684 031 Rand Corp Santa Monica Calif A MODEL OF PHYSICIAN PRICING, Joseph P. Newhouse. Feb 69, 21p Rept no. P-4011-

Descriptors: (\*Medicine, Costs), (\*Economics, \*Medical personnel), Classification, Psychology, Cost effectiveness, Attitudes, Value engineering, Mathematical models. Identifiers: Monopolies, Competition, Cost analy-

Knowledge about the economics of medical care is scanty, and it is not clear whether the market for physician services can be better characterized as monopolistic or competitive. This paper attempts to shed some light upon that question. (Author)

AD-684 053
Naval Medical Research Inst Bethesda Md
CLASSIFICATION OF NAVY HOSPITAL
CORPS STUDENTS BY DISCRIMINANT
ANALYSES,
Medical research interim rept.,
Martin K. Chen, and Adele Wood. 1968, 9p
NAVMED-M4303.05-0001D-1
Availability: Pub. in Military Medicine, v133 n12
p997-1003 Dec 68.

Descriptors: (\*Students, Classification), (\*Military medicine, Naval training), Attrition, Naval research, Feasibility studies, Programming (Computers), Predictions, Performance (Human), Statistical analysis.

Identifiers: Navy Hospital Corps, Computer analysis, Discriminant analysis.

The purpose of the study is to test the "ility of certain ability, interest and demographic in differentiating graduates and nongrate of the Corps school in Great Lakes. This is the first of a series of studies designed, ultimately, to provide the necessary input for a computer program by which candidates may be selected for the training program according to the probabilities of their predicted success, or failure to complete the program. (Author)

AD-684 387
Rand Corp Santa Monica Calif
A LINEAR PROGRAMMING APPROACH TO
POSITION-SALARY EVALUATION IN
SCHOOL PERSONNEL ADMINISTRATION,
James E, Bruno. Feb 69, 29p\* Rept no. P-4039

Descriptors: (\*Education, Job analysis), (\*Job analysis, Linear programming), Costs, Professional personnel, Instructors.

How much should a person with a given set of qualifications be paid so that his salary is consistent with other salaries in an organization. The purpose of this document is to explore the possible utilization of linear programming techniques for answering the above question in job-salary evaluation. Specifically, a linear programming model is used to analyze a hierarchical salary structure in a school district. The model is used to determine the relative importance of each of the compensable elements of each function (position) in a school district. In addition, monetary equivalents to these elements are derived from the model in order to develop a consistent scale of compensation within a school district. The proposed type of job-silary evaluation scheme might have wide application in the Air Force as well as civilian sector, since it could be of important use in determining discrepancies or in determining those positions in the Air Force which seem 'out of line' in terms of salary or grade classification. The development of utility objective functions, so factors of a job which are considered crucial, receive higher relative weights would tend to increase the flexibility of the salary schedule in responding to the changing needs and demands of the organization. (Author)

AD-686 059
Air Force Human Resources Lab Wright-Patterson AFB Ohio
A VOICE-RADIO METHOD FOR COLLECTING HUMAN FACTORS DATA.
Technical rept. Sep 67-May 68,
W. B. Askren, N. F. Schwartz, S. M. Bower, and M. D. Schmid. Jan 69, 34p Rept no. AFHRL-TR-

Descriptors: (\*Job analysis, Collecting methods), (\*Data processing systems, Communication systems, Nadio communication systems, Voice communication systems, Portable, Performance (Human), Maintenance personnel, Feasibility studies.

Available methods for collecting human factors data rely heavily on observations, interviews, and questionnaires. A need exists for other methods. The feasibility of using two-way voice-radio for this purpose was studied. The data-collection methodology consisted of a hum an factors analyst talking from a radio base station with technicians wearing portable radio units while they worked on jobs dispersed over an area. Verbal communication probed for information on equipment problems, procedural problems, delays, and potential hazards. The concept of using radio equipment to collect human factors data was tested, using technicians performing flight-line maintenance. Data collected by radio were compared with data collected by questionnaire, It was concluded that voice-radio is not only a feasible means of collecting human factors data in the field, but has certain advantages over questionnaires in determining hardware problems and amplifying the data-collection capability of the human factors analyst, (Author)



AD-687 213
Rand Corp Santa Monica Calif
THE DEMAND FOR MEDICAL EDUCATION A STUDY OF MEDICAL SCHOOL APPLICANT
BEHAVIOR,

Doctoral thesis. Frank A. Sloan. Apr 69, 41p Rept no. P-4075

Descriptors: (\*Medicine. Education), (\*Students, Behavior), Statistical data, Manpower studies, Attitudes, Motivation, Analysis, Economics, Costs. Wages, Theses.

Identifiers: \*Medical education, Applicants. Demand (Economics).

A primary concern of the study is the policy instruments which may be used to affect production levels of the medical education system. It has been suggested that one possible way to stimulate medical school expansion is through policies which act on demand for medical education. Two series, total applicants and applicants to medical schools with superior college records, were analyzed. (Author)

AD-687 399

Rand Corp Santa Monica Calif
INNOVATIONS AND EXPERIMENTS IN USES
OF HEALTH MANPOWER-A STUDY OF
SELECTED PROGRAMS AND PROBLEMS IN
THE UNITED KINGDOM AND THE SOVIET
UNION.

Edward H. Forgotson, and Judith H. Forgotson. Apr 69, 23p Rept no. P-4074

Descriptors: (\*Manpower studies, Public health), (\*Public health, \*Management planning), Research program administration, Medical technicians, Training, Problem solving, Classification, Effectiveness, Correlation techniques. United States, Great Britain, USSR. Identifiers: Feldshers, Comparison.

Neither the United Kingdom nor the Soviet Union provide programmatic or regulatory models that could be applied directly to solve the problems of developing and using intermediate health professionals and high-level medical auxiliaries in the United States. Nevertheless, a study of selected elements of their medical-care systems does provide guidance for regulatory revision in terms of the need for flexibility, and institutional focus for regulation, the active cooperation of the medical and nursing professions in developing and administering the regulations, a non-hierarchical relation between nurses and other high-level medi-cal auxiliaries, and the managerial role and respon sibility of the physician. Furthermore, such a study provides a certain perspective with which developments in the United States should be viewed. Neither country studied offered any ex-perience in experimental uses of manpower to solve current or evolving problems, and in neither country was there any mention of manpower research to define or redefine appropriate tasks for various manpower categories based on the skill and competence of the members of those categories. (Author)

AD-687 433
Rand Corp Santa Monica Calif
LIFETIME EARNINGS AND THE PHYSICIAN'S
CHOICE OF SPECIALTY,
Frank A. Sloan. May 69, 28p Rept no. P-4068

Descriptors: (\*Medical personnel, Wages), (\*Wages, Decision making), Job analysis, Statistical analysis, Mathematical models.

The objective of the study is to determine whether lifetime earnings in various physician specialties influence choice of field. If income does affect these decisions, what is the magnitude of the supply response. In Section II estimates of lifetime earnings are described. As is seen in Section III, specialty-general practice income differentials do not explain why virtually all medical school graduates enter residency programs in a physician spe-

cialty. Although earnings may not explain the decision to specialize, choices among particular specialties may reflect inter-specialty income differences. A model which measures the supply response to lifetime earnings is presented in Section IV. Although the sign of the lifetime earnings coefficient is significant in most regression equations at the one per cent level, the supply response to income is small. In Section V the lifetime earnings are replaced by a simplier measure of income, median earnings by specialty. The estimated response elacticities are virtually the same as before. Possit ie deficiencies in the model are examined in Section VI. Section-VII contains concluding remarks, (Author)

AD-688 538

Air Force Human Resources Lab Lackland AFB Tex Personnel Research Div SIMPLIFIED APPROACH TO A MANPOWER MANAGEMENT MODEL, Duncan L. Dieterly, Dec 68, 20p AFHRL-TR-68-116

Descriptors: (\*Personnel management, Air Force research), Models (Simulations), Theory, Man-power, Systems engineering, Classification, Job analysis, Statistical processes, Optimization. Identifiers: Manpower management models.

A manpower management model was designed to reflect four factors of concern to personnel managers: procurement, training, reassignment, and retention. Within the framework of this model, seven basic indexes were developed to yield simple, reliable descriptive data by which a manpower structure can be assessed at given points in time. These indexes permit evaluation of the consequences of past policies and anticipation of needs for future policy change. By means of the simple ratio indexes, specific manpower problem areas can be identified, and force strength can be compared across seven dimensions (loss, retention, gain, flow, transfer, utilization, and stability) and at various levels within an organization. (Author)

AD-688 605

AD-88 603

American Institutes for Research Silver Spring Md
DEVELOPMENT OF A TAXONOMY OF
HUMAN PERFORMANCE: A HEURISTIC
MODEL FOR THE DEVELOPMENT OF CLASSIFICATION SYSTEMS.
Technical rept.

Edwin A. Fleishman, Mar 69, 127p\* Rept no. AIR-726-3/69-TR-4 AFOSR-1365TR Contract F44620-67-C-0116, ARPA Order-1032

Descriptors: ('Performance (Human), Classification), Behavior, Scientific research, Models (Simulations), Reaction (Psychology), Decision making, Problem solving, Job analysis, Psychophysiology, Performance tests, Environment, Interactions, Medical examination, Personality, Psychometrics. Identifiers: Taxonomy.

Many workers in the behavioral sciences and human factors technologies have expressed the need for better classification systems to understand and apply the vast amounts of data acquired about man for the performance of jobs tasks. Reviews of existing classification systems, reported in previous technical reports in this series, disclosed more expressions of needs for these systems than actual systems in existence. Therefore, as a means for more systematically exploring the issues and options with respect to human performance classification, a heuristic model is presented. With this as a framework the uses of human classification performance systems, their content, and the methods available for their development are each discussed in turn. The report concludes with some recommendations about what the author believes is required if sig-nificant progress is to be made in the further development of human performance classification systems. (Author)

AD-688 810
George Washington Univ Alexandria Va Human
Resources Research Office
USE OF JOB AND TASK ANALYSIS IN TRAIN-

Jan 69, 44p Rept no. HUMRRO professional paper-1-69
Contract DA-44-188-ARO-2
Supersedes Report dated Jan 69, AD-683 019.
Presented at Headquarters, U. S. Continental Army Command, Fort Monroe, Virginia, Oct 68.

Descriptors: (\*Job analysis, Military training), Teaching methods, Standards, Performance tests, Documentation, Tanks (Combat vehicles), Human engineering, Simulation Officer personnel, Psychometrics, Maintenance, Air Force training, Army training, Theory. Identifiers: Objectives, Battalion commanders.

The paper records four presentations on the use of job and task analysis in training made at a briefing at Headquarters, U. S. Continental Army Command. The presentations specifically describe job and task analysis and its role in curriculum engineering. (Author)

AD-689 788
Naval Dental Research Inst Great Lakes Ill
A STUDY-OF A CIRCULAR DENTAL CLINIC
EMPLOYING ADVANCED PRACTICE
METHODS.

Research progress rept., Lioyd M. Armstrong; Barry E. Sharrow, Paul O. Walker, Bobby J. Priest, and Gordon H: Rovelstad. 2 Jun 69, 19p Rept no. NDRI-PR-69-06

Descriptors: (\*Dentistry, Medical research), Therapy, Dental personnel, Sterilization, Medical equipment, Design, Performance (Human). Identifiers; Dental clinics.

A clinical research study was initiated to determine the efficiency of an Experimental Dental Clinic. Methods of practice were employed that met the following basic requirements: (1) surgically clean environment; (2) details and assistant teamwork; (3) versatile patient treatment, and (4) reduced stress and strain. A circular five-chair operating suite was developed to support the sharing of a rotating dental assistant. A compact dental unit was developed to replace the conventional dental unit. All instruments were sterilized in individual packs and delivered tp the operatories as needed. The clinic was staffed with five dentists and seven auxiliaries. A conventional five-chair Control Clinic was staffed with five dentists and five auxiliaries. Fifteen dental officers rotated through both clinics. The number of surfaces restored and the actual time spent in placing the restorations was recorded. In the Experimental Clinic a total of 5,930 surfaces required an average of 9.8 minutes productive time each, compared to 5,582 surfaces in the Control Clinic that required 12.9 minutes per surface. This represents a 32 per cent increase in surfaces restored in the Experimental Clinic with the addition of one dental auxiliary to serve as a rotating dental assistant and one to sterilize the instrument packs. (Author)

AD-691 156
Personnel Research Lab Lackland AFB Tex
OCCUPATIONAL SURVEY OF THE MEDICAL
ADMINISTRATIVE CAREER LADDER 906X0,
VOLUME I, PART I,
Bernard R. Button, and Joseph E. Morsh. 1968,

Bernard R. Button, and Joseph E. Morsh. 1968 240p

See also Volume 1-Part 2, AD-691 157 and Volume 1-Part 3, AD-691 158.

Descriptors: (\*Medical personnel, \*Air Force), (\*Job analysis, Programming (Conputers)), Inventory, Classification, Identification, Background, Statistical processes, Training, Organizations, Time, Questionnaires.

Identifiers: Administrative personnel, \*Computer printouts, Computer analysis, Military occupa-



The report demonstrates how the electronic computer can be used to make comprehensive and detailed occupational information available to using agencies. A job inventory covering four spe-cialties in the medical administrative career ladder was administered to airmen in major air commands: Incumbents of all skill levels completed a background information section and rated on a 7point scale, the relative time spent on tasks.
(Author)

AD-691 157 Personnel Research Lab Lackland AFB Tex
OCCUPATIONAL SURVEY OF THE MEDICAL ADMINISTRATIVE CAREER LADDER 906X0. VOLUME I. PART II, Bernard R. Button, and Joseph E. Morsh, 1968,

See also Volume 1-Part 1, AD-691 156 and Volume 1-Part 3, AD-591 158.

Descriptors: (\*Medical personnel. \*Air Force), (\*Job analysis, Programming (Computers)), Inven-

tory, Classification. Statistical analysis, Organiza-Time, Identification. Identifiers: Administrative personnel. Computer analysis. \*Computer printouts, Military occupa-

The document is part 2 of volume one of a 2 volume survey of medical administrative personnel in the Air Force.

AD-691-158

Personnel Research Lab Lackland AFR Tex OCCUPATIONAL SURVEY OF THE MEDICAL ADMINISTRATIVE CAREER LADDER-906X0. VOLUME I. PART III,

Bernard R. Button, and Joseph E. Morsh. 1968.

See also Volume 1-Part 1, AD-691 156 and Volume 1-Part 2: AD-691 157.

Descriptors: (\*Medical personnel, \*Air Force), (\*Job analysis, Programming (Computers)), Inventory, Classification, Time, Statistical analysis, Organizations, Identification.

Identifiers: Administrative personnel, Computer analysis. \*Computer printouts, Military occupations.

The document is part 3 of volume one of a 2 volume survey of medical administrative personnel in the Air Force.

AC-691 159

Personnel Research Lab Lackland AFB Tex OCCUPATIONAL SURVEY OF THE MEDICAL ADMINISTRATIVE CAREER LADDER 906X0. VOLUME II. PART I, Bernard R. Button, and Joseph E. Morsh. 1968. 185p

See also Volume 2-Part 2, AD-691 160 and Volume 2-Part 3, AD-691 161.

Descriptors: (\*Medical personnel, \*Air Force), O'Sob analysis, Programming (Computers)), Inventory, Classification, Time, Statistical analysis, Organizations, Identification, Identifiers: Administrative personnel, Military oc-

cupations, Computer analysis. \*Computer prin-

The document is part one of volume 2 of a 2 volume survey of medical administrative personnel in the Air Force.

AD-691 160

Personnel Research Lab Lackland AFB Tex OCCUPATIONAL SURVEY OF THE MEDICAL ADMINISTRATIVE CAREER LADDER 906X0. VOLUME II. PART II. Bernard R. Button, and Joseph E. Morsh. 1968,

See also Volume 2-Part 1, AD-691 159 and Volume 2-Part 3, AD-691 161.

Descriptors: (\*Medical personnel, \*Air Force), (\*Job analysis. Programming (Computers)). Inventory. Classification, Identification, Time, Statistical analysis. Organizations.
Identifiers: Administrative personnel, Military oc-

cupations. Computer analysis. \*Computer prin-

The document is part 2 of volume 2 of a 2 volume survey of medical administrative personnel in the

AD-691 161

Personnel Research Lab Lackland AFB Tex OCCUPATIONAL SURVEY OF THE MEDICAL ADMINISTRATIVE CAREER LADDER 906X0. VOLUME II. PART III, Bernard R. Button, and Joseph E. Morsh. 1968,

See also Volume 2 Part 1, AD-691 159 and Volume 2-Part 2, AD-691 160.

Descriptors: (\*Medical personnel. \*Air Force). (\*Job analysis. Programming (Computers)), Inventory. Classification, Identification, Time, Statisti-

cal analysis. Organizations. Identifiers: Administrative personnel, Military occupations, Computer analysis, Computer prin-

The document is part 3 of volume 2 of a 2 volume survey of medical administrative personnel in the

AD-691 733 Purdue Univ., Lafayette. Ind. Occupational Research Center.

RESEARCH CENTER.
THE JOB DIMENSIONS OF WORKER ORIENTED' JOB VARIABLES AND OF THEIR ATTRIBUTE PROFILES AS BASED ON DATA FROM THE POSITION ANALYSIS QUESTION. Technical rept.

P. R. Jeanneret, and Ernest J. McCormick, Jun 69. 123p Rept. no. TR-2 Contract Nonr-1100 (28)

Descriptors: (\*Job analysis. Classification), Statistical analysis. Identification. Personnel

management, Questionnaires.

Identifiers: PAQ (Position Analysis Questionnaires), Position analysis questionnaires.

The study was designed to investigate the hypothesis that there is some structure underlying the domain of human work, and that this structure can be defined in terms of one or more sets of job dimensions. The basic approach to the derivation of these dimensions involved the characterization of job activities and work situations in behavioral of 'worker-oriented' terms using a job analysis in-strument known as the Position Analysis Questionnaire (PAQ). Two major data sources were developed and structured in terms of the behavioral job elements comprising the PAQ. One set of data consisted of 536 jobs analyzed with the PAQ, while the second set of data consisted of the ratings of the relevance of 67 different human at-tributes to each of the job activities and work situations described in the PAQ. Three different multivariate procedures were used to construct several sets of job dimensions. There were noticeable similarities between all of the dimen-sions, and it was concluded that there is a certain structure to the world of work that can be identified. Implications for the use of such dimensions. particularly in the synthetic validity context. are noted. (Author)

AD-691 736 Purdue Univ Lafayette Ind Occupational Research Center THE DEVELOPMENT AND BACKGROUND OF THE POSITION ANALYSIS QUESTIONNAIRE.

Ernest J. McCormick, Paul R. Jeanneret, and Robert C. Mecham. Jun 69, 66p Rept no. TR-5 Contract Nonr-1100 (28) Descriptors: (\*Job analysis, \*Ouestionnaires). Psychometrics, Performance (Human). Identifiers: PAQ (Position Analysis Question-naires). Position analysis questionnaires.

The report deals with the background and the development of the Position Analysis Questionnaire (PAQ), which was used as the basic job analysis instrument in the research program. The PAQ (Form A) used in the study includes 189 job elements of an essentially "orker-oriented" nature. these elements generally characterizing work activities of a behavioral nature (or that have strong implications in behavioral terms), and elements that characterize certain a pects of the context within which human work is performed. The job elements of the PAO have been used as the basis for deriving various sets of job dimensions, and for studies of an exploratory nature that deal with the potential use of the PAQ as the basis for developing synthetically-derived job attribute requirements, and for job evaluation purposes. The report describes the development of the PAQ. Form A, from earlier job analysis instruments, and the more recent development of a modified ver-sion of the PAQ. Form B. (Author)

AD-691 737

Purdue Univ Lafayette Ind Occupational

A STUDY OF JOB CHARACTERISTICS AND JOB DIMENSIONS AS BASED ON THE POSITION ANALYSIS QUESTIONNAIRE.

Rept. no. 6 (Final), Ernest J. McCormick, Paul R. Jeanneret, and Robert C. Mecham. Jun 69, 26p Contract Nonr-1100 (28)

Descriptors: (\*Job analysis. Classification). Questionnaires, Statistical analysis, Identification. Identifiers: PAQ (Position Analysis Questionnaires). Positionanalysis questionnaires.

It was hypothesized that, across the spectrum of jobs, there is some underlying 'structure' of human work in terms of the human behaviors involved. The project was directed toward the identification of behaviorial job elements and of their organization into job dimensions, and the exploration of certain possible practical applications of job data based on such job elements or dimensions. The project involved the development of a job analysis instrument called the Position Analysis sis Questionnaires (PAQ) that included 189 job elements of a worker-oriented nature. Principal components analysis procedures were used in the analyses of two types of data based on the PAQ. One set consisted of job data for 536 jobs that were analyzed with the PAQ. The other consisted of 'attribute profiles' of the job elements: (These consisted of median ratings of the relevance of 67 human attributes to each job element). (Author)

AD-691 759
California Univ Berkeley Human Factors in Technology Research Group
TASK EXTENSION AND RESPONSIBILITY
FOR RESOURCE DEPLOYMENT. Working paper. E. R. F. W. Crossman. Mar 69, 15p Rept no. HFT-

Contract N00014-67-A-0114

Descriptors: (\*Management engineering. \*Job analysis), Statistical analysis, Measurement, Personnel management, Time studies, Management control systems, Costs. Decision making, Supervision. Distribution theory. Identifiers: \*Resource allocations, Range (Extremes).

Methodological deficiencies revealed in field trials of Jaques' Time-span of Discretion instrument, point to a need to include resource-deployment as a second dimension in measuring level of organiza-tional work. This can be achieved by estimating resources allocated by the superior to per-formance of each task for which task-extension is



measured. Unitary models and estimators of resource-deployment span and capacity are developed for proposed use in further field sturesource-deployment span and capacity dies. These promise better statistical properties than time-span of discretion. It is suggested that mean resource-deployment rate may be estimated as the aggregate of five distinct types of resource rate, viz., own time, workforce time, rate of overhead service usage, rate of raw material usage, cost of capital equipment, cost of maintaining inventory. (Author)

Dayton Univ Ohio DYNAMIC METHODS IMPROVEMENT: A SU-PERVISORY PROGRAM FOR HOSPITALS AND MEDICAL CENTERS. Merle D. Schmid. 1969, 185p\*

Descriptors: (\*Hospitals, \*Management planning), (\*Supervision, Hospitals), Public relations, Personnel management, Flow charting, Data, Analysis, Job analysis, Performance (Human), Machines, Humans.

Contents: Work simplification in hospitals; Techniques of work simplification; How to become motion conscious; How to develop a better method; How to put the new method to work; Information system and forms design; The hospital supervisor's job - how to simplify it; Work-measurement and work-standards: Work sampling; Work measurement sampling.

AD-692 406 Illinois Univ Urbana Group Effectiveness Research Lab

THE EFFECTS OF PROGRAMMED CULTURE TRAINING UPON THE PERFORMANCE OF VOLUNTEER MEDICAL TEAMS IN CENTRAL Technical rept.

Gordon E. O'Brien, Fred E. Fiedler, and Thomas T. Hewett, Jun 69, 52p\* Rept no. TR-76 Contract Nonr-1834 (36), Order-454

Report on Communication, Cooperation, and Negotiation in Culturally Heterogeneous Groups. See also Technical rept. no. 77, AD-692 408.

Descriptors: (\*Culture, Programmed instruction). (\*Group dynamics, Central America), Medical personnel, Interactions, Performance (Human), Effectiveness, Adjustment (Psycholozy), Environment, Correlation techniques, Honduras, Guatemala, Statistical processes.

Identifiers: Culture assimilators, Crossculture (Sociology), Volunteers, Self instruction, Com-

The study compared the performance of volunteer medical teams who received a programmed culture assimilator test with teams who did not receive the assimilator. All team members, all citizens of the United States, worked for three-week periods in Honduras and Guatemala and were rated on their success in conducting clinics and managing community development projects. The effect of culture training upon productivity was accentuated in teams in which the majority of members had worked in Central America before. Assimilator training also had greatest effect for teams working in villages in which teams experienced relatively little difficulty in their relations with the communi ty. (Author)

4D-492 408

Illinois Univ Urbana Group Effectiveness

A MULTITRAIT-MULTIMETHOD ANALYSIS OF PREDICTORS AND CRITERIA OF NURSING PERFORMANCE.

Technical rept.. Stanley M. Nealey, and Terry W. Owen. Jul 69, 37p Rept no. TR-77 Contract Nonr-1834 (36)

Report on Communication, Cooperation, and Negotiation in Culturally Heterogeneous Groups. See also Technical rept. no. 75, AD-692 407.

Descriptors: (\*Nurses, Performance (Human)). Effectiveness, Behavior, Supervision, Leadership, Motivation, Medical personnel.

Many of the results obtained by Nealey and Blood (J. App. Psych, v52, 1968) in a study of nursing supervision in a Veterans Administration Hospital were reinforced in the present study which was carried out in the same setting. In addition, multi-ple measures of nursing behavior and nursing effectiveness were examined by the multitrait-multimethod approach. Estimates of nurse behavior by the nurses themselves and by their superiors ere uncorrelated with each other and with a more objective measure of nurse behavior. Interpretations of multitrait-multimethod results obtained in organizational settings are discussed. The obtained relations among predictors and between predictors and criteria of performance, have implications for the establishment of an effective performance-re ward-feedback system by which superiors could motivate subordinates. (Author)

AD-692 586

Building Research Station Watford (England) ACTIVITY SAMPLING ON BUILDING SITES.

Current papers, A. J. Stevens, May 69, 10p Rept no. CP-16/69 Report on Further experiences in the use of optical

Availability: Pub, in Work Study, v18 n2 p27-33 Feb 69. No copies furnished.

Descriptors: (\*Construction, Job analysis), (\*Job analysis, \*Time studies), (\*Reading machines, Job analysis), Data processing systems, Sampling, Buildings, Optical scanning, Programming (Com-puters), Great Britain. puters), Great Dimain. Identifiers: Computer aided analysis.

The Building Research Station has been using sampling techniques to obtain detailed information on the labour expended on site allocated to various categories of work. This involves up to 1000 categories of Work. This involves up to town recordings being made daily with each recording containing several pieces of information. To speed up the work of the analysis the Station has been developing the use of special recording forms which can be read directly into an optical reader. The scales tenses the shadmarked forms into The reader transcribes the handmarked forms into punched paper tape suitable for direct presenta-tion to a digital computer. The Station has been using these forms for about two years. After dealing briefly with the practical aspects of the sampling technique this paper concentrates on the snags that occurred when using these forms in the field and how they were overcome, and also describes the type of information obtained from the analysis and explains how this is presented by the computer, (Author)

AD-699 923

Navy Medical Neuropsychiatric Research One San Diego Calif THE MILITARY EFFECTIVENESS OF NAVAL SERVING AS MEDICAL SPE-ENLISTEES SERVING AS MEDICAL SPE-CIALISTS.

John A. Plag, Jerry M. Goffman, and Lester M. Murphy. Nov 69, 34p Rept no. NMNRU-70-4

Descriptors: (\*Naval personnel, Effectiveness), (\*Medical technicians, Performance (Human)), Reviews, Background, Performance tests, Recruiting, Correlation techniques, Dental personnel, Hospitals, Regression analysis, Mathematical prediction. Identifiers: Enlisted personnel, Military effective-

ness, Training program graduates, Reenlistment.

A sample of enlistees who entered the naval service and graduated from recruit training were divided into two groups -- those assigned to medical specialties and those assigned to other occupational ratings. The two groups were compared on the basis of biographical data, cognitive test scores, rate of effectiveness, and rate of reenlist-ment. Formulae were derived for predicting effectiveness for all enlistees and for the medical specialists along. These formulae were compared in order to ascertain whether assignment as a medical specialist might have a moderating effect upon the predictive validities obtained. (Author)

Lifson Wilson Ferguson and Winick Inc Dallas

CONSTRUCTION AND ADMINISTRATION OF TEN AIR FORCE JOB INVENTORIES, Clyde C. Mayo. Oct 69. 34p AFHRL-TR-69-27 Contract F41609-68-C-0016

Descriptors: (\*Job analysis, Air Force personnel), Personnel management. Inventory, Air Force personnel, Supervisory personnel, Questionnaires, Programming (Computers), Data processing systems, Management planning. Identifiers: Career ladders, Job inventories.

Ten job inventories were constructed for survey of a number of Air Force career ladders. Background variables designed to assess task-re-lated information were included in each inventory, A replication of a previous study of contributions of technical advisers to inventory construction was related to an earlier finding that airmen at supervisory skill levels provide the best job information. Broad statements to work designed to discriminate between job types on a more global level than task statements were included in eight job inventories. Trial answer sheets designed to be scored by optical scanning devices were administered on two surveys. Inventory constructors predicted job types for all career ladders surveyed. Write-in information from administrative surveys were reviewed, and significant contributions were added to job inventory content. Inventory responses were keypunched and verified in preparation for electronic data processing. (Author)

AD-700 746

Lifson Wilson Ferguson and Winick Inc Dallas

THREE STUDIES OF JOB INVENT/DRY PROCEDURES: SELECTING DUTY CATEGO-RIES, INTERVIEWING, AND SAMPLING, Clyde C. Mayo. Nov 69, 18p AFHRL-TR-69-32 Contract F41609-68-C-0016

Descriptors: (\*Personnel management, Air Force research), (\*Job analysis, Inventory), Classifica-tion, Sampling, Statistical processes, Standards, Operations research, Organizations, Supervision, Identifiers: Career ladders, Interviews, Task evaluation, Nonsupervisory tasks.

Three United States Air Force job inventory procedures were studied in depth: categorizing task statements by duties, interviewing technical advisers for job information, and detecting bias in survey samples. Variations in usual grouping of supervisory tasks were found to be occasionally necessary. Depending upon the career ladder surveyed, non-supervisory tasks are related to work section, function, or equipment format. Criteria are suggested for determining the point at which interviews become more productive than publications research. Interviewing evaluated when ad-visers are chosen according to experience, rank, kind of organization to which assigned, and job type. An analysis of trends in ten survey samples was made. (Author)

AD-700 747

Lifson Wilson Ferguson and Winick Inc Dallas A METHOD FOR DETERMINING JOB TYPES FOR LOW APTITUDE AIRMEN, Clyde C. Mayo, Nov 69, 19p AFHRL-TR-69-35 Contract F41609-68-C-0016

Descriptors: (\*Personnel management, Air Force Descriptors: ("Personnet management, Air Force research). ("Job analysis, Aptitude tests), Questionnaires. Statistical data, Reviews, Performance (Human), Standards, Factor analysis, Safety, Supervision, Errors, Air Force training, Identifiers: Marginal personnel, Air Force career

An opinion survey method for identifying low aptitude job types was developed and used in a study of 11 air Force career ladders. Lists of low aptitude tasks were defined by technical advisers. These tasks were then rated on nine factors by Air Force instructors who also described low aptitude job types and gave their opinion concerning the possibilities for advancement and training of low aptitude personnel. In an evaluation of the research methodology, strengths and weaknesses of the opinion survey method were delineated. The relative case with which the tasks lists were constructed lent support to the utility of the method. A limitation in the method was recognized in the inability to control for systematic rater bias. (Author)

AD-703 317 Human Resources Research Organization Alexan-DEVELOPMENT AND EVALUATION OF AN INTEGRATED BASIC COMBAT/ADVANCED INDIVIDUAL TRAINING PROGRAM FOR MEDICAL CORPSMEN (MOS 91A10). Technical rept., Joseph S. Ward, Nelson I. Fooks, Richard P.

Kern, and Robert D. McDonald. Jan 70, 86p Rept no. HUMRRO-TR-70-1 Contract DAHC19-70-C-0012

Descriptors: (\*Medical personnel, \*Army training), Teaching methods, Training devices, Performance tests, Motivation, Attitudes, Job analy-Identifiers: \*Functional context training.

A study was conducted to determine the effect of integrating the Basic Combat Training (BCT) and Advanced Individual Training (AIT) of the Medi-cal Corpsman (MOS 91A10) for Conscientious Obwould serve as a test of the combined BCT/AIT concept of training for broader application in the Army training system. The curriculum for COs was redesigned to provide a continuous MOSoriented 16-week training sequence. Redesign in-cluded introduction of new training techniques. such as TV geared to the rate of learning and arrangement of instructional material in functional

AD-704 936 Naval Medical Research Inst Bethesda Md EVALUATION OF A NEW METHOD IN TEACHING MEDICAL MATHEMATICS TO NAVY HOSPITAL, CORPS SCHOOL, STU-DENTS. Medical research interim rept., Martin K. Chen 1970, 10p Availability: Pub. in Military Medicine, v135 n2

Descriptors: (\*Medicine, Naval training), (\*Mathematics, \*Teaching methods), Reviews, Performance (Human), Performance tests, Correlation techniques. Identifiers: Comparison, Evaluation, Medical mathematics.

p122-128 Feb 70.

Four companies (classes) of Navy Hospital Corps School students were used as subjects in an experiment designed to compare the effectiveness of a new method with that of the old method in teaching medical mathematics. The new method required mastery of a simple mathematical opera-tion called proportions, while the old method emphasized rule memorization. The data indicated that while there was no significant difference in the effectiveness of the two instructional methods, students taught by the new method required only one hour of practice as compared with three hours for students taught by the old method. (Author)

AD-705 176

Lifson Wilson Ferguson and Winick Inc Dallas OCCUPATIONAL SURVEY OF THE RADIOLO-GY CAREER LADDER 903XO.

Technical rept... Andrew T. Garza. Mar 69, 9p AFHRL-TR-69-106 Contracts AF 41 (609)-3049, AF 41 (609)-1982

Descriptors: (\*Job analysis, \*Medical personnel) (\*X rays, Military medicine), Classification, Questionnaires, Programming (Computers), processing systems.
Identifiers: "Career ladders, "Military occupations. Computer analysis, Radiology.

A job inventory covering four specialties in the radiology career ladder, and consisting of 369 tasks grouped under 15 duty categories, was lidministered to airmen in 16 major air commands. In cumbents of all skill levels completed a background information section and the relative time spent on tasks rated on a 7-point scale. The airmen also indicated on a 7-point scale the source of training for each task performed. Job descriptions derived by electronic computer are presented for four specialty groups, four job-type clusters, eleven significant job types, and for the total sample of the Radiology Career Ladder. Narrative summaries are presented for the clusters and job types identified by the automated job-clustering program, (Author)

AD-705 177 Lifson Wilson Ferguson and Winick Inc Dallas OCCUPATIONAL SURVEY OF THE DENTAL LABORATORY CAREER LADDER 982NO. Joseph E. Morsh, Larry W. Adkins, and Sidney B. Boyce. Jun 68, 10p PRL-TR-68-4 Contract AF 41 (609)-3049

Descriptors: (\*Job analysis, \*Dental personnel), Inventory, Questionnaires, Programming (Computers). Data processing systems.
Identifiers: "Career ladders, "Military occupations. Computer analysis.

A job inventory covering four specialties in the dental laboratory career ladder, and consisting of 247 tasks grouped under 14 duty categories, was administered to airmen in 16 major air commands. Incumbents of all skill levels completed a background information section and rated, on a 7point scale, relative time spent on tasks. The airmen also indicated, on a 7-point scale, amount of work experience on each task compared with other tasks performed. Job descriptions are presented for 15 groups selected according to background information variables, and identified by the automated job clustering program. (Author)

American Institutes for Research Pittsburgh Pa DEVELOPMENT OF A TAXONOMY OF HUMAN PERFORMANCE: A FEASIBILITY STUDY OF ABILITY DIMENSIONS FOR CLAS-SIFYING HUMAN TASKS. Technical rept.,

George C. Theologus, Tania Romashko, and Edwin A. Fleishman. Jan 70, 211p Rept nos. AIR-726-1/70-TR-5, R70-1 AFOSR-70-0930TR Contracts F44620-67-C-0116, ARPA Order-1032

Descriptors: (\*Performance (Human), Classifica-tion), (\*Job analysis, Classification), Reliability, Models (Simulations), Psychometrics.

The report describes a series of studies carried out to develop methods by means of which observers can describe tasks in terms of their ability require-ments. The general objective was to provide an in-strument which could be utilized to describe both laboratory and operational tasks along a com-prehensive set of specifically defined ability dimensions. (Author)

AD-706 456

Union Carbide Corp New York Silicones Div THE RELATIVE IMPORTANCE OF JOB FAC-TORS: A NEW MEASUREMENT APPROACH. Technical rept. Stanley M. Nealey, May 70, 69p Rept no. TR-1 Contract N00014-67-A-0299-0011

Descriptors: ("Naval vessels (Combatant), Personnel management). (\*Job analysis, Statistical processes). Job analysis, Attitudes, Correlation techniques, Factor analysis, Destroyers, Supervisory personnel, Group dynamics. Identifiers: Job satisfaction, Military occupations,

Personnel retention, Enlisted men.

The paper reports on a new two-phase measurement technique that permits a direct comparison of the perceived relative importance of economic vs. non-economic factors in a job situation in accounting for personnel retention, the willingness to produce, and job sausfaction. The paired com-parison method was used to measure the preferences of enlisted men aboard a U.S. Navy destroyer for seven different job classifications, their supervisors, and seven groups of co-workers. In a second phase of the study, these three job factors were combined, together with various amounts of pay, to form two-factor composites, Multiple correlation was used to predict preferences for these composites from the job fac-tor scale values obtained in phase one, Implications of the method and findings to the formation of personnel policy are considered. (Author)

Naval Postgraduate School Monterey Calif THE COLLECTION AND ANALYSIS OF HUMAN FACTORS DATA IN TASK ANALYSIS. Master's thesis. Rodney Paul Kempf. Apr 70, 52p

Descriptors: ("Job analysis, Human engineering). (\*Data processing systems, Feasibility studies), Questionnaires, Analysis of variance, Statistical processes, Programming (Computers), Naval research. Theses.

The paper develops a questionnaire to be used in determining the necessity of various human fac-tors to the successful performance of any particular job. Included in the proposed questionnaire are fifty-eight characteristics and a scheme for rating the variables. A program is developed for analyzing the data collected. A two-way analysis of variance by ranks is used to detect significant dif-ference between the characteristics, and, given a difference exists, a method similar to the multiple range test is employed to separate the several characteristics into significance groups, the various groups being ranked on an ordinal scale.
(Author)

Rand Corp Santa Monica Calif
THE ECONOMICS OF GROUP PRACTICE. Joseph P. Newhouse, Oct 70, 24p Rept no. P-4478

Descriptors: (\*Medicine, \*Costs), (\*Hospitals, Economics), Attitudes, Public opinion, Wages, Statistical analysis. Identifiers: Hospital outpatient clinics.

The paper presents a theoretical discussion of how costs of outpatient medical practice might be expected to vary with the size of the group providing services. It focuses upon an element which seems to have been disregarded, the incentives facing an individual physician to keep the costs of his practice down and his work effort high. The situation becomes serious in hospital outpatient clinics. (Author)

AD-715 641 Human Resources Research Organization Alexan-



PERFORMANCE IN FIVE ARMY JOBS BY MEN AT DIFFERENT APTITUDE (AFQT) LEVELS: I. PURPOSE AND DESIGN OF STU-DY.

Technical rept..

Robert Vineberg, Elaine N. Taylor, and John S. Caylor, Nov 70, 44p\* Rept no. HUMRRO-TR-70-

Contract DAHC19-70-C-0012

Descriptors: (\*Army personnel, Effectiveness), (\*Manpower studies, Performance (Human)), Job analysis, Classification, Aptitude tests, Background, Education, Questionnaires, Correla-tion techniques, Statistical distributions, Reviews. Identifiers: Socioeconomic status. Marginal personnel, "Mulitary occupational specialties. Ethnic groups, Rating scales, Aptitude levels.

To provide information about the performance and characteristics of effective and ineffective marginal personnel in the Army, a study has been made of approximately 1800 men with experience ranging up to 20 years in five MOSs (11E, Armor Crewman; 63C, General Vehicle Repairman; 76Y, Unit and Organizational Supply Specialist: 91B, Medical Specialist: 94B, Cook). The sample included a comparison group of men in the same jobs but coming from the upper (not-marginal) part of the AFQT distribution. Performance was measured by intensive job sample tests, job knowledge tests, and supervisor ratings. Informaknowledge lesis, and supervisor ratings, informa-tion about background, personal characteristics, and military experiences was obtained through biographical questionnaires, a battery of published and experimental tests, and Army records. The report, the first in a veries, describes the rationale, research design, and general chronology of research events in the study. (Author)

AD-716 760

Naval Personnel and Training Research Lab San Diego Calif THE RELIABILITY OF EXPERT OPINION IN

SPECIFYING COURSE CONTENT. Technical bulletin (Final).

Hervey W. Stern. Dec 70, 17p Rept no. STB-71-4

Descriptors: (\*Programmed instruction, Preparation), ('Professional personnel, Effectiveness), Reliability, Personnel management, Naval train-ing, Teaching methods, Management planning, Statistical analysis. Identifiers: Curriculum development, Expert

opinions, Individual differences.

In the development and revision of curricula, subject-matter expetts are frequently called upon to aid in specifying skill or knowledge requirements and to provide opinions on the degree of im-portance associated with the requirements for the establishment of a curriculum. If, however, these expert judgments are not reliable, their validity is expert judgments are not reliable, their validity is automatically questionable. In order to evaluate this problem, data from a previous study was supplemented and analyzed for rate-rerate reliability of a group of Navy subject-matter experts, including an analysis of individual differences. The rate-rerate reliability for all 16 judges over a six month period was 59. Absolute changes in rating averaged slightly over half a scalar unit on a 6-point scale. When four raters were selected on the basis of their individual reliability, their combined retererate reliability was 68. Other measures in rate-rerate reliability was .68. Other measures indicate the selection of raters on an index of in-dividual stability may increase reliability, although the effect this has on validity is not known. These findings indicate that a large number of raters does not insure high reliability, and that selecting a sub-

Center for Naval Analyses Artington Va A COMPARISON OF THE MILITARY AND CIVILIAN HEALTH SYSTEMS, Mordechai E. Lando. Dec 70, 78p Rept no. CNA-Professional Paper--57

set may result in an increase in precision in overall

reliability. (Author)

Descriptors: ("Public health, "Civilian personnel). (\*Military medicine, Public health), Military personnel, Hospitals, Costs, Manpower studies, Medical personnel. Identifiers: "Health services, "Military health ser-

vices, \*Civilian health services.

Military personnel were found to be in better health than their civilian compatriots. There is no way of determining to what extent this is due to starting out with a healthier population and to what extent it is due to the greater per capita expenditure discussed earlier. In addition, it was noted that military medical care is much more hospital intensive than in the civilian economy. To reemphasize this point; in the Air Force in 1967, 74% of all those excused from duty were hospitalized whereas in the civilian economy, hospital days for males 17:64 were only 26% of their work loss days.

AD-717 25d

Human Resources Research Organization Alexan-

AN APPROACH TO STANDARDIZING HUMAN PERFORMANCE ASSESSMENT, John D. Engel, Oct 70, 14pt Rept no. HUMRRO-

professional paper-26-70 Contract DAHC19-70-C-0012

Presented at the Planning Conference of 'Stan-dardization of Tasks and Measures for Human Factors Research', held at Texas Technological Univ., Lubbock, Tex., on Mar 70.

Descriptors: (\*Performance (Human), Measurement), (\*Test construction (Psychology), Standardization), (\*Performance tests, Standardization) tion), Test methods, Visual acuity, Auditory acui-ty, Decision making, Symbols, Documentation, Identifiers: Evaluation, Task analysis, Taxonomy

The standardization and evaluation of methods of performance assessment represents an important area of concern. In this paper an approach that concentrates on two critical areas and the relationship between them is discussed. These are: (a) a task classification system, and (b) a performance measure classification system. An example is presented that illustrates some preliminary research related to the use of a performance measure classification system. The paper concludes by suggesting areas and directions for future research efforts. (Author)

AD-719 265

Human Resources Research Organization Alexan-

dna va AN APPROACH TO THE DEVELOPMENT OF SYNTHETIC PERFORMANCE TESTS FOR USE IN TRAINING EVALUATION, William C. Osborn, Dec 70, 11p Rept no. HUMRRO professional paper, 30-70
Contract DAHC19-70-C-0012
Presented at the Annual Military Testing Associa-

tion Conference (12th), French Lick, Ind., Sep 70.

Descriptors: (\*Test construction (Psychology), Synthesis), ("Training, Test methods), Joh analysis. Aptitude tests, Management planning, Quality

Identifiers: Task analysis, Training evaluation, Job relevant testing.

The paper describes an approach to the selection of inexpensive alternatives to fully job-relevant performance tests. Based on the concept of con-tent validity, the approach is to utilize the skill and knowledge required of the trainee as a criterion for assessing the cost and job-relevance of fabricated alternatives to performance tests. Two job tasks are analyzed to illustrate the concept. (Author)

AD-719 379

laval Personnel and Training Research Lab San Diego Calif

VALIDITY, PREDICTIVE SEFICIENCY, AND EMACTICAL SIGNIFIC ME OF SELECTION

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Technical bulletin,

Ervin W. Curtis, and Edward F. Alf. Avg 70, 18p Rept no. STB-71-1

Descriptors: (\*Performance tests, Effectiveness). Predictions, Efficiency, Statistical data. Identifiers: "Personnel screening tests.

The report presents a rationale and associated tables for use by researchers and others concerned with evaluating the practical effectiveness of personnel tests. (Author)

AD-720 253

Air Force Human Resources Lab Lackland AFB Tex Personnel Div DEVELOPMENT OF AN EQUATION FOR EVALUATING JOB DUFFICULTY, Donald F. Mead, Nov. 2019. APRILL TR-70-42 See also AD-740.254-annl. 41. 2525.

Descriptors: (\*Iob analysis, \*\*\* force personnel), Expression analysis, Supervisory personnel, Mathematical prediction.

Identifiers: E aluation.

A report is given of the first in a series of studies. designed to produce a method for evaluating the difficulty levels of Air Force enlisted jobs. In the study, 250 job descriptions in the Medical Materiel Career Ludder were ranked on difficulty by supervising personnel using a complex partitioning, system. Computation of interrater agreement for these rankings yielded an r of .93. Twenty-one variables were defined which might have entered into the judgments made by supervisors, and sugression analyses subsequently identified three variables which predicted the job difficulty rankings with an R of .95. These three predictor variables were number of tasks performed, dif-ficulty of tasks performed per unit time, and number of tasks performed, squared, Application of a shrinkage correction formula to test for chance errors resulted in a negligible correction to the obtained R. Developing weights for the three predictor variables in separate samples and cross-applying to predict the difficulty level of jobs the opposite group yielded an R of .94 in h in arross-applications. Comparisons of the rank order positions of the criterion jobs using predicted and rated difficulty values revealed nonsignificant differences. Results of the study indicate that the difficulty level of jobs within the Medical Materiel Career Ladder can be adequately determined using the derived three-variable regression equa-

AD-720 254

Air Force Human Resources Lab Lackland AFB Air Force Human Resources Lab Lackland AFB Tex Personnel Div CONTINUATION STUDY ON DEVELOPMENT OF A METHOD FOR EVALUATING JOB DIF-FICULTY, Donald F. Mead. Nov 70, 20p AFHRL-TR-70-43 See also AD-720 253 and AD-720 255.

Descriptors: (\*Job analysis, \*Air force personnel), Regression analysis, Mathematical prediction, Maintenance personnel, Supervisor, personnel. Identifiers: Evaluation.

The paper describes the development of a multiple regression equation which satisfactorily p, edicted the difficulty level of 250 jobs from the Vehicle Maintenance Career Ladder. The correlation between the predicted values and the criterion values assigned the jobs by Air Force supervisors was .93. The research design was a replication of one used earlier with jobs from the Medical Materiel ladder. The results obtained in the study support the major findings of the earlier investigation. The same basic predictor variables combined to form the most effective prediction equation in both investigations. The primary factors reflected in the job difficulty evaluation policy were number of tasks in the job description, difficulty level of tasks performed, and time spent performing the tasks. These findings provide support for the hypothesis that there are common factors which influence supervisors' judgments of job difficulty in all Air Force career ladders. (Author)

AD-720 255

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Air Force Human Resources Lab Lackland AFB Tex Personnel Div

DEVELOPMENT OF A CONSTANT STANDARD
WEIGHT EQUATION FOR TALLUATING JOB
DIFFICULTY.

Donald F. Mead, and Raymond E. Christal. Nov 70, 20p AFHSL-TR-70-44 See also AD-720 253 and AD-720 254.

Descriptors: ("Job analysis, "Air force personnel), Supervisory personnel, Regression analysis, Correlation techniques. Identifiers: Evaluation.

The paper describes the development of a multiple regression equation which captured the job difficulty evaluation policy of accounting and finance supervisors. The equation yielded predicted difficulty values for 250 jobs which correlated .95 with the supervisory rankings. These results validated the findings of two previous job difficulty studies using jobs from the Vehicle Maintenance and Medical Materiel Career Ladders. A constant standard weight equation was developed which reflected the job evaluation policy of supervisors from the three diverse career fields. Applying this equation to the appropriate predictor data from the three studies yielded valid difficulty measures for 750 jobs within the three career ladders tested. (Author)

AD-722 260
Air Training Command Randolph AFB Tex
DETERMINING TRAINING REQUIREMENTS.

1 Sep 64, 36p

Descriptors: (\*Training, Systems engineering), Symposia, Education, Management engineering, Air Force personnel, Military requirements. Identifiers: Air Force training programs, \*Training programs

With automation on the ascendancy, many of the simple but tedious jobs of the past are being converted to machine operation. Personnel must be retrained for different jobs requiring more complex skills to keep pace with our changing technology. No longer can training be looked upon either as 'terminal' or lacking in dignity. One of our national goals is that every citizen become employable and productive. Training has become a never ending requirement which will assume more and more importance as time passes. It is imperative, therefore, that training programs be designed for maximum effectiveness in terms of economy of operation and relevance to the operational requirement. The most logical approach to improving training appears to through the application of scientific principles which underlies any engineering process. (Author)

AD-722 326
Naval Medical Research Inst Bethesda Md
COMPARISON OF TWO CURRICULA FOR
TRAINING BASIC HOSPITAL CORPS SCHOOL
STUDENTS,
Medical research interim rept...

Medical research interim rept.,
Dagmar E. Brodt, and Adele H. Wood. 16 Mar 71,
51p NAVMED-M43-03X-05-1

Descriptors: (\*Training, \*Medical personnel), Education, Pharmacology, Costs, Effectiveness, Injection (Medicine), Chemotherapeutic agents. Identifiers: \*Curricula, \*Hospital corps.

The objective of this work unit was to compare the cost/effectiveness of a segment of the present subject centered curriculum with that of a new broad field organized curriculum Pharmacology and Pa-tient Care (PPC), for training Hospital Corps School students to prepare and administer medications. Presentation of PPC required 81 instructional hours while the conventional courses required 126 hours. During a pilot study, selected instructors were oriented to teaching PPC; optimal content, content organization and sequence were determined: time requirements for course segments were identified; and evaluation instruments were assessed for validity and reliability. Comparison of scores on the criterion instruments showed statistically significant differences in favor of the experimental companies on the written tests: a statistically significant difference in favor of control companies in performance of the subcutaneous injection procedure; and no significant difference between the groups on per-formance of the intramuscular injection procedure. Feedback data on graduates obtained at their first hospital assignments showed a significant difference in scores on a knowledge test in favor of the experimental group and no significant difference between scores on a skill rating scale. The saving of 45 hours of instructional time through use of PPC represents a potential monetary saving of \$140.40 per student. (Author)

AD-723 167
Technomics Inc Mclean Va
MID-PROJECT STATUS AND PLAN REPORT,
VOLUME I.
Progress rent.

21 Apr 71, 264p Contract N00014-69-C-0246 See also Volume 2, AD-723 170.

Descriptors: (\*Mılitary medicine, \*Naval training), (\*Personnel management, \*Medical personnel), Reviews, Job analysis, Inventory, Management planning, Maintenance personnel, Neurology, Radiography, Pharmacology, Programming (Computers), Data processing systems.

Identifiers: Hospital corpsmen, Dental technicians, Enlisted personnel.

A' five-year project was undertaken in support of the Bureau of Medicine and Surgery, Navy Medical Department, with the objective of bringing about appropriate improvements, revisions, additions and deletions to the present whole-system of medical education and training within the Department. The document, consisting of Volumes 1 and II, records mid-project progress in summary form, as well as more detailed project activity for the remainder of the third project year. Volume 1 covers activity in the first and second project years, detailed procedures for conducting job analysis in the third project years, and the increasingly operational role of Navy personnel in the operational adoption of the job analysis system. (Author)

AD-723 170
Technomics Inc Mclean Va
MID-PROJECT REPORT, VOLUME II. PART A.
GENERAL CORPSMAN TASK INVENTORY.
PART B: HOSPITAL CORPS TASK STATEMENT LIBRARY.

21 Apr 71, 235p Contract N00014-69-C-0246 See also Volume 1, AD-723 167.

Descriptors: (\*Military medicine, \*Naval training), (\*Personnel management, \*Medical personnel), Reviews, Job analysis, Classification, Inventory, Coding, Statistical analysis.
Identifiers: Hospital corpsmen, Computer printouts, Difficulty index, Criticalness.

The document is the second volume of a two volume report on the whole-system of medical

education and training in the Navy Medical Department. It includes the general ward corpsman final inventory and a computer printout of the valid test statements for enlisted inventories by functional code.

AD-723 569

Training.

Naval Personnel Research and Development Lab Washington D C DETERMINATION OF AN OPTIMAL RECRUITING-SELECTION STRATEGY TO FILL A SPECIFIED QUOTA OF SATISFACTO-RY PERSONNEL, William A. Sands. Apr 71, 50p Rept no. WRM-71-

Descriptors: (\*Recruiting, Mathematical models), (\*Naval personnel, Recruiting), Selection, Costs,

Identifiers: CAPER (Cost of Attaining Personnel Requirements), Cost of attaining personnel requirements.

Managers of military and civilian personnel systems justifiably demand an estimate of the payoff, in dollars and cents, which can be expected to result from the implementation of a proposed selection program. The Cost of Attaining Personnel Requirements (CAPER)—Model provides an optimal recruiting-selection strategy for personnel decisions which minimizes the total cost of recruiting, selecting, inducting, and training a sufficient number of persons to meet a specified quota of satisfactory personnel. (Author)

AD-724 809

Minnesota Univ Minneapolis Industrial Relations Center

THE RELATION OF SAMPLE DEMOGRAPHIC CHARACTERISTICS TO JOB SATISFACTION. Technical rept.,

Technical rept.,
Philip A. Jury, William Weitzel, Rene V. Dawis,
and Patrick R. Pinto. 1971, 21p Rept no. 9001
Contract N00014-68-A-0141-0003

Descriptors: (\*Job analysis. \*Attitudes), (\*Sociometrics, Job analysis), Factor analysis, Personality, Personnel management, Education, Industrial psychology. Identifiers: \*Job satisfaction.

In order to examine the effects of such demographic characteristics as sex, age, education, oc-cupational, company and job tenure and manage-ment level on job satisfaction, the responses of 1139 exempt employees in six companies to 28 satisfaction scales were factor analyzed. In comparing the factor structures for the various demographic groupings, patterns of scale loadings across groupings were emphasized. It was expected that some factors would be common for all demographic groupings of employees, while other factors would vary in their patterns of scale loadings. The resulting factor structures showed that factors related to compensation and personal progress and development work aspects had very similar scale loadings for all groupings of em-ployees. However, the two remaining factors that dealt with superior-subordinate interactions and the context of the organization were perceived differently among the demographic groupings. Thus the conclusion of the study was that demographic characteristics reflected a difference in the per-ception of organizational-related variables but not in the perception of individual-related variables for job satisfaction. (Author)

AD-725 176
Performance Research Inc Washington D C
CONFERENCE ON PERSONNEL RETENTION
RESEARCH.
Final rept. 1 Apr 66-31 Mar 71,
Richard Myrick. 31 Mar 71, 11p Rept no. PRI-364-3
Contract N00014-66-C-0130
See also Report dated May 69, AD-689 515.

Descriptors: (\*Military personnel. \*Attrition). Motivation. Personnel management. Symposia. Performance (Human). Leadership. Identifiers: Job satisfaction.

The report describes a series of seven conferences, held between December 1966 and February 1969, which investigated the psychologi-cal factors bearing on effective job organization and design as well as other factors which might influence productivity and satisfaction. About a dozen persons attended each conference. Some individuals attended all or nearly all the con-ferences; others only one or two. The range of disciplines represented by the participants excusciplines represented by the participants extended:from anthropology and sociology to incidental psychology and psychiatry. One of the conferences was devoted to personnel retention research and was attended by the 'regular' participants as well as a number of Navy civilian social scientists and a group of military and other civilian appreciates. participants. A report of this conference was published in 1969. (Author)

AD-725 498

AU-725 498
Washington Univ Seattle Dept of Psychology
EXPECTANCY THEORY PREDICTIONS OF
JOB SATISFACTION, JOB EFFORT, JOB PERFORMANCE, AND RETENTION OF NAVAL
AVIATION OFFICERS.
Technical rept.

Terence R. Mitchell, and Donald Albright. May 71, 37p Rept no. TR-71-17

Contract N00014-67-A-0103-0013. ARPA Order-

Descriptors: (\*Job analysis, \*Naval personnel), (\*Officer personnel, \*Attrition), Performance (Human), Predictions, Aviation personnel. Identifiers: \*Job satisfaction.

Expectancy theory suggests that an individuals behavior can be predicted from the degree to which the behavior is instrumental for the attainment of outcomes multiplied by the evaluation of these outcomes. This theory was used to predict the effort, satisfaction, performance and retention of two squadrens of Naval Aviation Officers. The results provide strong support for the prediction of satisfaction and retention. Only moderate support was generated for the prediction of effort and per-formance. Modifications of the theory are suggested in light of the data presented. (Author)

AD-725 860

Navy Medical Neuropsychiatric Research Unit San Diego Calif PREDICTING THE EFFECTIVENESS OF NEW MENTAL STANDARDS ENLISTEES IN THE U.

John A. Plag, Jerry M. Goffman, and James D. Phelan. Dec 70, 91p Rept no. NMNRU-71-42

Descriptors: (\*Naval personnel. (\*Standards, Naval personnel), Marine Corps. Ap-titude tests, Effectiveness, Predictions, Recruit-

ing. Identifiers: Personnel screening tests. Project 100000.

The study compares the performance and adjustment of 'new mental standards' Marines with enlistees of higher mental ability. About four out of ten new standards Marines fail to complete a twoyear tour successfully, while only one out of four high ability Marines fail to do so. Thirteen of 34 pre-enlistment characteristics, 4 of 12 early training variables, and 5 of 17 later training variables. have significant validities for predicting effective-ness during a first tour of duty for low ability Marines. The best of these predictors were combined into tables of odds for ready estimation of the chances that a recruit will successfully complete a two-year tour. Use of these tables of odds at recruiting stations could help in the selec-tion for enlistment of Marine applicants most likely to serve effectively. (Author)

AD-726 977

Ohio State Univ Research Foundation Columbus THE JOB ANALYSIS APPROACH TO CRITERION EQUIVALENCE.

Special technical rept. no. 2, Robert J. Wherry, Apr 56, 14p Rept no. OSURF-Contract DA-49-083-OSA-606

Descriptors: ("Job analysis. "Psychometrics). Factor analysis. Correlation techniques. Standards. Sensory perception. Performance (Human), Psychophysiology, Behavior. Personality.

Identifiers: Rating systems. Criteria.

In a former study by Wherry, Ross, and Wolins two job analyses, one on the basis of psychological skills required and the other on the basis of job operations performed, were used along with other indices to indicate the equivalence of 10 criteria of job success. In a second paper the authors made a theoretical analysis and suggested further research. The present paper attempts to carry out these suggestions by investigating several facets of the problem including types of elements, skills. operations, or factors; types of rating; and types of statistical analysis.

AD-729 998

Navy Medical Neuropsychiatric Research Unit San Diego Calif

SUCCESS IS PREDICTABLE.

Ransom J. Arthur. 1971, 9p Rept no. NMNRU-71-

William C. Porter Lecture presented at the Annual Meeting of the Association of Military Surgeons of the United States, held at Washington, D. C., on 2

Availability: Pub. in Military Medicine, v136 n6 p539-545 Jun 71.

Descriptors: (\*Naval personnel, Selection), History, Background. Antarctic regions. Predictions. Diseases. Physical fitness. Sociometrics.

A discussion is presented of clinical vs. actuarial prediction. Samples are chosen from research work primarily at the U. S. Navy Medical Neu-ropsychiatric Research Unit. San Diego. showing the influence of demographic and personal history characteristics on success in the Navy and in various naval assignments such as Antarctic duty. There is also a discussion on the use of life events to predict illness and a discussion of the development of actuarial tables for prognostic purposes. (Author)

AD-730 594

Air Force Human Resources Lab Lackland AFB Tex Personnel Div THREE METHODS FOR ESTIMATING DIF-FICULTY OF JOB TASKS, William B. Lecznar. Jul 71, 14p AFHRL-TR-71-30

Descriptors: (\*Job analysis. Air force research). Air force personnel. Statistical analysis. Scale.

The exploratory study using a developed for the Medical Materiel Career Ladder is concerned with a simple evaluation of three methods for estimating the difficulty of tasks: rating on a relative scale: rank ordering; and comput-ing an index from average grade job imcumbents performing each task. The data suggest the rating approach is one to be preferred although some additional questions arose concerning possible effects of task wording on variability across judges. or raters. (Author)

AD-732 639

AMOUNT AND REPLY, Joseph P. Newhouse. H. E. Frech. III. Paul B. Ginsburg, and Frank A. Sloan. Feb 71, 37p Rept no. P-4011-2

Descriptors: (\*Medicine. \*Costs). Medical personnel. Dentistry. Economics. Population. Urban Identifiers: Rates (Costs)

The paper consists of three items: a slightly revised version of P-4011-1, 'A Model of Physician Pricing, as published in the Southern Economic Journal: a comment upon that article by H. E. Frech III and Paul Ginsburg; and a reply to the comment, (Author)

AD-803 924

AD-803 924

Bureau of Naval Personnel, Washington, D. C.

New Developments Research Branch,

TECHNIQUES FOR CONDUCTING RATING

QUALIFICATIONS SURVEYS. Roy W. Gettings. Sep 65, 14p NPRA-WRM-66-6

Descriptors: (\*Personnel management. Data processing systems), (\*Naval personnel, Performance tests), Job analysis. Operators (Personnel), Collecting methods. Instruction manuals.

Sampling.
Identifiers: Rating qualification survey.

This memorandum reports on one phase of research directed toward the development of improved management tools for reducing cost of reviewing the Manual of Qualifications for Advancement in Rating (NavPers 18068) while increasing the validity of the end product. Specifically, this memorandum presents guidelines for conducting rating qualifications surveys. These guidelines provide a degree of standardization in surveys and survey techniques which permit development of criteria for the evaluation of survey results and allow cross comparison of results between ratings. (Author)

IPRS\_15703

Joint Publications Research Service. Washington.

REVAMPING CURRICULUM FOR MEDICAL TRAINING.

I. P. Lidov, and Yu. M. Lopukhin. 17 Jun 68. 7p Trans. of Zdravookhranenie Rossiiskoi Federatsii (USSR) p30-2 Apr 1968.

Descriptors: (\*Medical personnel, \*Education). Training, Public health, Medical research, USSR.

Joint Publications Research Service Washington. D.C

IMPROVEMENT SOUGHT IN TRAINING OF MEDICAL WORKERS, B. M. Chekney, and N. Kirillova. 3 Oct 68, 16p

Trans. of Zdravookhranenie Rossiiskoi Federatsii (USSR) v12 n8 p41-47 1968.

Descriptors: (\*Medical personnel. \*Training). Universities, Public health, Medicine.

Contents: Improving medical staffs in Russian federation: Concerning functioning of Altay Medical Institute: Consultations on training of medical

N65-81945

California Univ., Berkeley. Space Sciences Lab.
DECISION MAKING AND RESOURCE ALLOCATION IN A PUBLIC HEALTH AGENCY.
Internal working paper.
David Hudson Stimson. Dec 64, 38% IWP-18 Grant NsG-243-62

\*Management (\*Public health. Descriptors: planning). Handbooks. Background, Budgets, Organizations. Law, Public relations. Theory, Sociometrics, Environment, Decision making. Value engineering. Models (Simulations). Personnel. Predictions. Identifiers: Working papers.

The study is an attempt to analyze through the method of operations research the decision making process of the California State Department of Public Health in its administration and allocation of a federal grant-in-aid to the State for improving the outside-the-hospital services for chronically ill and aged persons. (Author)

N68-26614

Midwest Research Inst., Kánsas City, Mo.
MEDICAL APPLICATIONS OF AEROSPACE
SCIENCE AND TECHNOLOGY.
Final rept., 1 May 1967-31 May 1968,
David Bendersky. 31 May 1968, 86p NASA-CR95100
Contract NASr-63 (13)

Descriptors: \*Aerospace environments. \*Medical science. \*TECHNOLOGY UTILIZATION, Bibliographies. Bioastronautics. Bioengineering, Electrocardiography. Electrodes, Medical equipment, Nasa programs.

The transfer of aerospace generated technology to applications in the non-aerospace biomedical field are discussed. Procedures have been developed for the efficient and orderly transfer of applicable science and technology and consist of 5 basic steps: (1) define the specific biomedical problem; (2) identify potential solutions through literature searches, circulation of problem abstracts to research centers and contractors; and personal contacts: (3) modify the original technology, as required, to adapt it to the problem; (4) evaluation of the technology by the investigators who sub-mitted the problem; and (5) document and disseminate information on successful transfers. Covered in this report are 94 biomedical problems submitted by participating medical schools. Based on literature searches and other retrieval techniques. 22 successful technology transfers were possible out of potential solutions for 46 of the problems. Several NASA Tech Briefs pertaining to biomedical devices are included.

N68-27549
Texas Univ., Austin.
MEDATA: A: NEW CONCEPT IN MEDICAL
RECORDS MANAGEMENT,
Caroline Horton, Tate M. Minckler, and Lee D.
Cady, Jr. 1967, 42p NASA-CR-86715
Contract NSR-44-012-039
Presented at the Fall Joint Computer Conf. Nov

Descriptors: \*Computer programs. \*Medical personnel, \*Medical sciences. Conferences. Data processing terminals, Dataretrieval. Data storage, Fortran, Magnetic tapes, Research.

MEDATA, an automated medical records system, represents an organized approach to the collection, storage, and retrieval of medical data. This completely user-oriented system takes advantage of the background and training of the medical secretary and simultaneously bypasses the conventional keypunch operators and coders. It is capable of responding directly (in his own terminology) to the user who lacks extensive computer background. The system is inexpensive to maintain, and the programs and basic system concepts are machine independent. (Author)

## N68-29601

Nos.29901
Michigan Univ., Ann Arbor. Center for Research
Utilization of Scientific Knowledge.
ORGANIZATIONAL BEHAVIOR RESEARCH
UTILIZATION PROCESSES. A STUDY OF
PROCESSES FOR THE UTILIZATION OF
SCIENTIFIC FINDINGS FROM ORGANIZATIONAL BEHAVIOR RESEARCH.
Finalrept.
7 Oct 1967. 196p NASA-CR-89837
Grant NGR-23-005-116

Descriptors: "Human behavior. "Leadership.
"Management, "Personnel subsystems, "Reserch projects. Group dynamics. Statistical analysis.

Seminars, individual questionaires, evaluation sheets, and assessment sheets are employed as techniques for utilization of organizational behavior research knowledge by a specific complex organization element. The organizational research material selected for use pertained to promotion of new patterns of management and motivational approach to supervision, personnel performance and productivity, and most effective practices of supervision and management of professional and scientific personnel. Problems of supervision and management in the specified organization element are identified, described, and assessed. Feasibility of applying research knowledge to such problems is determined. Alter-native methods which could be used to transfer and apply research knowledge to management problems are developed and evaluated summary conclusions offered are that the seminar approach is an effective method of transferring behavioral science research knowledge to managers, and that the several utilization techniques must be viewed in terms of characteristics of the using organization and its leadership.

N68-35979
Texas A and M Univ., College Station.
A PROBABILISTIC APPROACH TO THE LONG
RANGE PLANNING OF MANPOWER AND
OTHER RELATING ELEMENTS,
Richard Andrew Lejk. May 1967, 258p NASA-CR85119
Contract NAS9-4317

Descriptos: \*Costs, \*Management, \*Manpower, \*Mathematical models, \*Probability theory. Pesonnel, Project management, Regression analysis, Tradeoffs.

Long range planning is considered by a probabilistic model for consolidating project requirements and allocating budgetary limitations. Attention is given to the estimation of total manpower requirements, the development of manpower dis-tribution functions, and the determination of related personnel support requirements. Regression analysis was used to predict total manpower requirements and their allocation over the life cycle of the project; and a constrained-weighted regression technique is presented for a limited data base. A matrix technique is used to determine associated-personnel support requirements and costs for each project; and forecasting the total budgetary limitation for the planning organization via regression or econometric methodology is described. The gap or difference between manpower and budgetary requirements is discussed. and integer programming and response surface technology are used to eliminate this gap. Through this alignment process and the recycling of the rescheduled individual project requirements by a complete data model a master long-range plan is produced.

ORNL-4231
Oak Ridge National Lab., Tenn.
PROGRAM FOR SELECTING FIRSTLINE
FOREMEN,
G. F. R. Johnson, and C. L. Jaffee. Mar 68, 30p
Contract W-7405-eng-26

Descriptors: (\*Personnel management, Selection). Management planning. Standards. Performance (Human).

The development and use of a technique for the evaluation of managerial or supervisory skills are described. The technique of simulation represents an attempt to replicate the essential aspects of a given situation (in this case the supervisory job) so that the prediction of an individual 's likelihood of success on a managerial job will be enhanced. Techniques such as the in-basket exercise, leader-

less group discussion and business game are discussed, and the samples of the types of information generated are included as well as their usefulness. (Author)

PB-166 661

Rept. on Proj. RAND.

PB-166-661
RAND Corp.. Santa Monica. Calif.
AN APPLICATION OF A NETWORK FLOW
MODEL TO PERSONNEL PLANNING.
Research memo..
William Gorham. 24 Jun 60, 90p RM-2587 AD-241
289
Contract AF49 638 700

Descriptors: (\*Personnel management, Mathematical models), (\*Mathematical models, Personnel management), (\*Training, Military personnel), Management planning, Economics, Programming (Computers), Manpower studies.

PB-167 689

Human Resources Research Office. George Washington Univ., Alexandria, Va. THE DEVELOPMENT OF TRAINING OBJEC-TIVES, Roger G. Smith. Jr. Jun 65, 109p Research bull.

Roger G. Smith. Jr. Jun 65, 109p Research bull. HumRO-RB-11 AD-448 364; N64-32681 Contract DA44 188AR02

Descriptors: (\*Military training. Performance tests). (\*Military personnel, Training). (\*Research program administration, Military training). (\*Training, Effectiveness), Training devices, Education, Job analysis, Technicians, Instructors, Military organizations, Maintenance personnel. Decision making, Achievement tests.

Modern concepts and techniques used in determining training objectives are described. A training objective is defined as a precise statement of one of the performances expected of a student upon completion of a course, a complete list of such objectives constituting the mission of a course. The concepts and techniques described are based on research performed by both military and civilian researchers in the field of training. The development of job-related, detailed statements of objectives is considered to be a matter of the first importance in designing effective training programs. These objectives permit every element of a training program-lessons, texts, practical exercises, and examinations-to fall into line in a consistent manner. Training objectives that are job relevant will provide for a course that will also be responsive to the needs of the unit to which the soldier will go after training. The techniques described were selected as being practical for Army training personnel.

PB-175 608
Philco-Ford Corp., Palo Alto, Calif. WDL Div.
JOB PERFORMANCE AIDS AND THEIR IMPACT ON MANPOWER UTILIZATION,
Albert B. Chalupsky, and Thomas J. Kopf. May
67, 101p WDL-TR-3276
Contract DL-81-05-67-06

Descriptors: (\*Manpower studies, Performance (Human)). Reviews. Job analysis, Electronic technicians, Nurses, Hospitals, Display systems, Training devices, Efficiency.

The investigation was designed to review and synthesize the results of job performance aid research and application and to explore the current and potential impact of such aids upon industrial manpower utilization. The study involved a review and analysis of relevant research literature and reports of job aid applications. In addition, a field study was conducted of job performance aid usage in two distinctly different occupational areas: electronics assembly and patient care. Interviews were conducted in 24 organizations, twelve representing each occupational area. The results show that, depending upon their design and usage, job performance.



formance aids can compensate for lack of training and experience, improve job quality, and increase productivity. Evidence is generally lacking concerning the extent to which job performance aids can compensate for basic aptitude deficiencies. The impact of job aids is particularly apparent in complex or lengthy tasks, diminishing in effectiveness as tasks are subdivided into short cycle. repetitive operations. A basic framework for advancing the field of job performance aids is proposed and discussed. Recommendations are made for comprehensive job aid development and demonstration efforts. On a more basic level, a series of research questions are posed, the solutions to which would contribute to better understanding and long-term utilization of job aids. (Author)

PB-176 361

Mobilization for Youth. New York NEW OCCUPATIONS DEMONSTRATION.
CONDUCTED WITH GOUVERNEUR HEALTH SERVICES PROGRAM OF BETH ISRAEL HOSPITAL. Anita S. Vogel, 3Feb 67, 142p

See also PB-176 465.

Descriptors: (\*Economics. Employment). (\*Employment. Training), Job analysis. Public health. Social sciences, Technicians, Personnel, Selection, Hospitals, Manpower studies. Identifiers: On-the-job training. Community Action Program.

The first pan of this report documents the experiences of staff and trainees during the pre-vocational phase (II) of the New Health Occupations Program. The report highlights the major findings coming out of the classroom and the preliminary on the job training (OJT) experiences, and discusses a number of other facets of the program. including the crucial problem of job development. Included in the appendices are the training curriculum and rationale originated by staff specifically for the Health Occupations program. The second section outlines the development of training programs for new occupations, based on experiences with the prototy pe Health Occupations program. It includes descriptions of training and employment proposals for five occupations where an unmet public service need has been identified, either by the institution or agency responsible for its delivery or by the community which has demonstrated the consquences of service inadequacy. The origin of each proposal is given, along with the steps taken to develop occupational training to meet the needs as documented, the specialists consulted in agencies or institutions concerned, and the present stage of development for each occupa-tional proposal. (Author)

PB-177 412

Commission on Human Resources and Advanced Education.

SYMPOSIUM ON MANPOWER THEORY HELD AT AIRLIE HOUSE, WARRENTON, VIRGINIA, NOVEMBER 3-5, 1966.

C. Arnold Anderson. John K. Folger, W. Lee Hansen, and John L. Holland. 5 Nov 66, 116p\* Contract DL-81-09-66-16

Pub. in The Journal of Human Resources. v2 n2 p141-253 1967.

Descriptors: (\*Manpower, Symposia), Employment, Industrial psychology. Education. Professional personnel. Manpower studies. Management planning, Costs, Social sciences, Statistical analysis, Tables.

Contents: The balance between supply and demand for college graduates: Current psychological theories of occupational choice and their implica-tions for national planning; The economics of scientific and engineering manpower: The adaptation of education to a mobile society.

PB-177 414 Temple Univ., Philadelphia. Pa. Bureau of Economic and Business Research.

A MANUAL FOR THE DEVELOPMENT OF
ESTIMATES OF FUTURE MANPOWER
REQUIREMENTS FOR TRAINING PURPOSES,
Louis T. Harms, Rosella James, and Robert C. Springer, Mar 66, 62p Contract MDTA-41-64

Descriptors: (\*Manpower studies. \*Industrial training). Statistical analysis. Employment, Population, Costs, Production, Advanced planning, Industries. Education.

The booklet shows how obstacles may be removed. (1) It provides know-how by showing the steps to be taken in making careful estimates of future manpower needs for small areas: (2) it is also suggested that the personnel needed to do the job of estimating comprises the group familiar with information and methods who are working in state and local offices of the United States Employment Service, university or college bureaus of business and economic research or economics departments and education departments and state and local vocational education departments and local high schools; (3) it is also pointed out that the necessary time to make such future estimates can be purchased or set aside, if arrangements are made far enough in advance. (Author)

PB-177 563 PB-177 563
Massachusetts Inst. of Tech., Cambridge.
COMPUTER-BASED JOB MATCHING
SYSTEMS: AN EXPLORATION OF THE STATE
OF THE ART AND THE PROPOSED NATIONWIDE MATCHING SYSTEM,
Frazier Kellogg. 1967, 326p
Grant DL-91-23-67-11

Descriptors: (\*Manpower studies, Data processing systems), State-of-the-art reviews, Computers, Computer personnel, Employment, United States Government, Education, Industrial relations, Personnel management, Symposia. Identifiers: Job matching systems.

In its report to the President and the Congress, the National Commission on Technology, Automation, and Economic Progress recommended that a computerized nationwide service for matching men to jobs be established. Such a service was expected to improve and extend labor market information, and thereby help to reduce unemployment and underemployment. But even as the Commission advanced the proposal, companies, professional associations, and public organizations had started to design and operate a variety of computer-based 'matching systems.' In short, many systems, local and national in scope, and internally as well as externally oriented to labor markets were operating or in advanced stages of design. In the spring of 1966, the United States Employment Service awarded a contract to a consulting firm for help in designing a national a consulting firm for help in designing a national system and in developing several operational pilot projects. Against this background a two-day workshop was planned. It was intended to accomplish several purposes. First it would bring together people involved in the operation and design of a variety of different kinds of matching together to describe what they were doing systems to describe what they were doing. Second, the workshop was planned to bring the Second, the workshop was planned to oring the 'doers' in matching systems operation and design together with people from the academic community with backgrounds in manpower research especially the operation and structure of both internal and external labor markets. This report is the product of the workshop. (Author)

PB-177 657 Yankelovich (Daniel), Inc., New York. HOME HEALTH AIDE DEMONSTRATION PROJECT EVALUATION. Research rept.

Feb 68, 87p

Contract OEO-2343 Related document, PB-177 658.

Descriptors: (\*Public health, Nurses). (\*Man-power studies, Nurses). Cost effectiveness. Sex. Aging (Physiology), Medical personnel. Convalescence. Education. Medicine. Wages. Training, Employment. Identifiers: Low income groups. Home health

The Research Report is the twenty-second and final report in a series prepared for the Office of Economic Opportunity and the U.S. Public Health Service in connection with this study of six of the twelve pilot projects commissioned by these agencies in fiscal year 1967. The pilot projects were designed to develop effective operational procedures for increasing the supply of home health aides through utilization of older, low-income people, and to test the effectiveness of these procedures. The projects included in our work, and the reports issued for each are included.

PR-177 658 Yankelovich (Daniel), Inc., New York. HOME HEALTH AIDE DEMONSTRATION PROJECT EVALUATION. Management rept.,

Dec 67: 84p Contract OEO-2343 Related document, PB-177 657.

Descriptors: (\*Public health, Nurses), (\*Manpower studies, Nurses). Cost effectiveness. Sex, Aging (Physiology), Medical personnel. Con-valescence. Education, Documentation. valescence. Education, Documentation. Medicine, Wages, Employment, Training. Identifiers: Low income groups, Home health

The Management Report is the fifteenth in a series of documents prepared for the Office of Economic Opportunity and the U. S. Public Health Service on six of the twelve Pilot Projects created by these Agencies in fiscal year 1967, to develop effective operational procedures for increasing the supply of home health uides through utilization of older, low-income people, and to test the effectiveness of these procedures. The projects included in our work and the reports issued or pending for each,

PB-177 821 National Planning Association, Washington. D. C. Center for Priority Analysis.

MANPOWER REQUIREMENTS FOR
TIONAL OBJECTIVES IN THE 1970'S, Leonard A. Lecht. Feb 68, 469p Prepared in cooperation with Department of Labor, Washington, D. C. Manpower administra-

Descriptors: (\*Manpower studies, Economics). (\*Manpower, Advanced planning). Employment. Education, Industrial training, Predictions, Management planning. Personnel management. Job analysis. Costs, United States Government. Labor, Civilian personnel. Statistical analysis. Ta-

Contents: Goals analysis and manpower needs; The economic framework for the manpower projections: The overall manpower requirements for achieving national goals: The pursuit of national objectives and employment opportunities for nonwhites; Manpower implications of the pursuit of individual goals -- some comparisons and, highlights for each goal; Implications for education and job training; Manpower requirements, na-tional goals, and manpower research needs in the perspective of the next decade; Estimating manpower requirements for national objectives -procedures and problems; Abstract of standards for goals and statistical tables.



PB-178 306

Educational Testing Service, Princeton, N. J. A PILOT STUDY TO DETERMINE THE FEASI-BILITY OF INVESTIGATING NATIONALLY THE IMPACT OF LICENSING PRACTICES ON THE AVAILABILITY AND MOBILITY OF NON-PROFESSIONAL MANPOWER IN OCCUPA-TIONS WHERE SKILL SHORTAGES EXIST.

Benjamin Shimberg, and John V. Moe. May 68,

Grant 91-32-68-18

Descriptors: (\*Personnel management, \*Job analysis), Costs, Education, Ophthalmology, New York, Florida, Illinois, Texas, California, Personnel, Maintenance personnel, Medical personnel, Industrial research, Research program administration. Performance tests, Industrial training, Manpower studies.

This document is the final report for a study which was conducted to explore the feasibility of obtaining information bearing on the impact of licensing on job entry and interstate mobility in certain nonprofessional occupations. Licensing procedures in the skill shortage occupations were studied in five geographically diverse states, in order to secure information about the structure, process, and effects of occupational licensing in those states. The report presents an analysis of the effects of licensing and recommendations for future research. Licensing does appear to inhibit both job entry and interstate mobility, and specific aspects of the licensing process which appear to contribute significantly to this inhibition are discussed.

#### PB-178 744

Case-Western Reserve Univ., Cleveland, Ohio. School of Library Science.

TRAINING PROGRAM IN MEDICAL LIBRARI-

ANSHIP AND HEALTH SCIENCES INFORMA-TION.

Annual rept. 1 Jul 67- 30 Jun 68,

Alan M. Rees. 30 Jun 68, 16p Sponsored by Public Health Service, Washington,

DC and National Library of Medicine. Washington, DC.

Descriptors: (\*Documentation, Medicine). (\*Training, Libraries), Recruiting, Students, Education. Public health.

Curriculum design and recruiting procedures are described for the subject training program.

PB-179 078

Minnesota Univ., Minneapolis. Industrial Rela-

MANPOWER PLANNING AND FORECASTING IN THE FIRM: AN EXPLORATORY PROBE.

Herbert G. Heneman. Jr., and George Seltzer. Mar 68, 191p Grant DL-91-25-67-10

Descriptors: (\*Manpower. \*Management planning), Personnel management. Industrial relations. Labor, Questionnaires. Predictions.

Contents: Methodology; Additional research needs; Tentative guidelines for manpower forecasting at the organization level: Questionnaire findings: manpower forecasting: Workshop on manpower planning and forecasting systems.

PB-179 345

National Center for Health Services Research and

National Center for Health Services Research and Development, Arlington, Va.

A REVIEW OF EPIDEMIOLOGICAL DATA, DATA SYSTEMS, AND SOURCES FOR ESTIMATING NURSE REQUIREMENTS FOR SHORT STAY HOSPITALS, William R. Parker. 12 Aug 68, 142p\*

Descriptors: (\*Public health, Statistical analysis), (Nurses, Manpower studies), Hospita Epidemiology, Biometry, Data processi systems, Diseases, Statistical data, Geography. Hospitals, processing

This document is part of a report of the Special Task Force responsive to the Health Manpower Analysis Group. The purpose of the effort is to identify categorize, and evaluate epidemiological data and data sources in order to analyze nurse manpower requirements in short stay hospitals, in the light of a health resource requirements model. (Author)

PB-179 471

Case Western Reserve Univ., Cleveland. Ohio. Center for Documentation and Communication

EDUCATION FOR HOSPITAL LIBRARY PER-

SONNEL: CONTINUATION OF FEASIBILITY STUDY FOR CONTINUING EDUCATION OF MEDICAL LIBRARIANS. Interim rept. no. 2, 16 Jan-20 Jun 68, Alan M. Rees. 16 Jul 68, 99p\*

Grant PHS-LM-00-422

Descriptors: (\*Libraries, 'Hospitals), (\*Professional personnel. Education), Research program administration, Population, Classification, Medi-cal equipment, Statistical data, Teaching methods. Interactions, Urban areas, Tables, Ohio. Identifiers: \*Medical librarians.

The survey of Ohio hospitals and hospital libraries described in this report constituted a preliminary task in the design, implementation and evaluation of a comprehensive program of continuing educa-tion for hospital library personnel. The research methodology involved the formal conceptualization of the role of the library within the hospitai or-ganization and the construction of data banks of information relating to three basic hospital functions-patient care, training and research; and the gathering of data concerning facilities, resources and services of hospital libraries and personnel. (Author)

PB-179 846

Northeastern Univ., Boston, Mass. Dept. of Economics. HIRING STANDARDS FOR PARAMEDICAL MANPOWER,

Morris A. Horowitz, and Harold M. Goldstein. Sep 68. 257p\* Grant DL-91-23-67-57

Descriptors: (\*Technicians, Hospitals), (\*Manpower studies. Personnel management). Urban areas. Job analysis, Medical personnel, Employment. Standards, Training, Optimization. Questionnaires. Professional personnel. Supervisory personnel, Statistical data, Data processing systems. Students. Tables.

Identifiers: Pilot studies. Employees. \*Paramedi-

The key objective to this pilot study was to explore the duties performed by employees in selected paramedical occupations, and the characteristics and skills that hospitals required of these employees. A second objective was to compare their hiring standards, as measured by the required education, training, and work experience, with their actual duties and functions performed on the job. The hypothesis to be tested is that the hiring standards established by hospitals are higher than needed for the duties performed, with the result that it is difficult to fill many paramedical jobs. (Author)

Community Programs and Training Consultants. Inc., Washington. D. C.
THE NON-PROFESSIONAL IN EXPERIMENTAL AND DEMONSTRATION PROJECTS.

Final rept., James W. Carper. Aug 66, 67p

Contract OEO-775

Descriptors: (\*Manpower, \*Employment), Training. Selection. Personnel. Education. Job analysis. Identifiers: \*Non-professional personnel.

The study was designed to examine the current use of non-professionals in one program area, manpower and employment programs. From an analysis of the experiences of those agencies which have used non-professionals the longest in the short period since passage of the E. O. A., an at-tempt is made to develop certain recommendations on the selection, training and usage of the non-professional in manpower- and employment programs. (Author)

PB-180 177

Neumeyer Foundation, Beverly Hills, Calif. THE FAMILY AGENT, A TRAINING MANUAL AND PROGRAM EVALUATION OF A NEW CAREER IN SOCIAL SERVICE.
Final rept.,
Joyce B. Lazar, Mar 67, 250p\*

Grant CG-66-9396

Descriptors: (\*Sociology, \*Job analysis), (\*Training, Sociology), Selection, Manpower, Professional personnel, Culture, Supervisory personnel. Identifiers: \*Social service, Family agents, Pover-

Contents: Why the program was developed; Application, screening and selection of family agents; Training of family agents; Concepts on the war on poverty; What is poverty; The culture of poverty; Orientation to Negro and Mexican American fami-lies; Family agent procedures; Orientation to probation department; Techniques for family agents; Work of the family agent and role of the supervisor; Family agent program - evaluation.

PB-180 367 Illinois Univ.. Urbana, Inst. of Labor and Industri-

THE SHORTAGE OF SKILLED AND TECHNI-CAL WORKERS. AN INQUIRY INTO SELECTED OCCUPATIONS IN SHORT SUPPLY, Walter Franke, and Irvin Sobel, Jun 68, 490p\*

Contract MDTA-5-64

Descriptors: (\*Labor. Manpower studies). Inequalities, Employment. Decision making, At-titudes, Training, Nurses, Medical technicians, Engineering personnel, Operators (Personnel), Reviews, Tables, Statistical data. Costs. Motiva-

Identifiers: Labor market, \*Manpower shortages, Skilled workers, Interviews. Occupations.

The general objectives of this study were summarized in the original project proposal as follows: In order to obtain insights and understanding that will help permit more rational adjustments to oc-cupational changes, we propose to study six key technical occupations in which there are critical shortages of workers. In the study, both the causes of critical occupational shortages and the effectiveness of current labor market processes and institutions in removing shortages will be examined.

PB-180 437 New Jersey Coll. of Medicine and Dentistry. A MANPOWER STUDY OF TECHNICAL PER-SONNEL IN HOSPITAL CLINICAL LABORA-

Final rept., James P. Harkness, Robert R. Cadmus, and Lois P. Tillman. Oct 68, 104p

Contract MDTA 26-64 Descriptors: (\*Medical technicians, Manpower studies). (\*Medical laboratories, Manpower studies), Hospitals, North Carolina, Statistical data.



The investigation has, as its main purpose, the survey of the kinds of workers in small, meduim and large hospitals located in all parts of the State of North Carolina. The report reviews the volume and quality of laboratory work carried on in these hospitals after which categories of laboratory quality are established for each hospital size. Following this, worker characteristics are described in each hospital size setting. The report ends with recommendations for future action. (Author)

PB-182 073
George Washington Univ., Washington, D. C.
ACCURACY ANALYSIS FOR PROJECTIONS
OF MANPOWER IN METROPOLITAN AREAS,
John Herbert Norton. 1967, 84p\*
Sponsored in part by Dept. of Labor, Washington,
D. C. Office of Manpower Policy, Evaluation and
Research.

Descriptors: (\*Manpower studies, \*Urban areas). (\*Labor, Predictions), Accuracy, Analysis of variance, Statistical processes. Population. Mathematical models, Sampling, Tables. Identifiers: Census.

The document discusses the reliability of labor force and manpower availability predictions, using census data as a basis for forecasting.

PB:182 146
Upjohn (W. E.) Inst. for Employment Research.
Washington, D. C.
THE FEASIBILITY OF A DIRECT METHOD OF
OBTAINING MANPOWER DEMAND DATA.
REPORT FOR DISCUSSION-PHASE 1,
Sidney A. Fine. 8 Nov 68, 141p\*
Contract DL-81-09-67-22

Descriptors: (\*Manpower studies, Employment). Labor. Statistical data. Correlation techniques. Education, Industrial training. Reports, Predictions. Reliability, Federal budgets. Research program administration, Job analysis, Management planning, Questionnaires, Sampling. Tables. Identifiers: Surpluses. Shortages, Interviews. Estimates, Lead time.

The problem to which the study addresses itself is the use of current manpower statistics as a basis for arriving at estimates of educational and training requirements for jobs in the United States. This is a fundamental use in manpower planning. From the estimates lead times are determined for the development vocational and professional skills. These lead times serve as a basis for anticipating shortages or surpluses of labor and thus influence the allocation of public funds for vocational and professional education. (Author)

PB-182 147
Institute for Creative Studies, Washington, D. C.
PRETRAINING VOCATIONAL ORIENTATION
THROUGH JOB ROTATION,
Nancy Barrett, William Carter, Charles
McClenon, Stuart Smith, and Robert Wolpert. Sep
68, 68p\*
Supported in part by Office of Manpower Policy,
Evaluation and Research, Washington, D. C.

Descriptors: (\*Industrial training, \*Manpower studies). Problem solving. Attrition. Employment. Group dynamics. Attitudes. Physical fitness. Psychometrics. Cost effectiveness, Correlation techniques. Models (Simulations). Probability. Identifiers: Dropouts, Unemployment, Job rotation. Underprivileged groups. Objectives.

The report investigates some of the causes of dropout from manpower training programs. In cases where early termination of training is deemed undesirable, solutions to the dropout problem are suggested. A substantial part of the report is concerned with a plan to encourage rational career planning through pretraining vocational orientation. A rotational on-job exposure

scheme is developed and guidelines for a pilot study are presented. Techniques for measuring benefits and costs are also discussed. (Author)

PB-182 598Research for Better Schools, Inc., Philadelphia, Pa.
AN ANNOTATED BIBLIOGRAPHY OF BENEFITS AND COSTS IN THE PUBLIC SEC-

Nov 68, 254p\* Contract OEC-1-7-062867-3053

Descriptors: (\*Education, Bibliographies), Management planning, Costs, Africa, Asia, Europe, Latin America, Middle East, Canada, Urban areas, Transportation, Economics, Agriculture, Industries.

Identifiers: Benefit cost analysis. Annotated bibliographies, \*Area planning and development.

The bibliography is aimed to contribute to an increase in systematic, scientific analysis in education (particularly) by providing a reasonable complete reference to the multidisciplinary literature of applications and theory of economics, operations research and systems analysis in a wide variety of field settings. (Author)

PB-182 936
Illinois Univ., Chicago. Center for Urban Studies.
THE DELIVERY OF COMPREHENSIVE
HEALTH SERVICE AS A COMMUNITY AND
NATIONAL GOAL,
Anne Gose. Sep 68, 47p\* Discussion paper-4
Contract HUD-H-980

Descriptors: (\*Urban planning. \*Public health), Interactions, Federal budgets. Housing. Wages. Sanitary engineering, Education, Physical fitness. Medical personnel. Personnel management, Communication systems, Attitudes. Motivation. Training, Systems engineering. Identifiers: Health services, Community develop-

Housing and urban development must necessarily include a continuing interest in health and health delivery systems. Such an interest is a logical outgrowth of the federal role in urban development, and herein lies a special need for co-ordination with other federal programs that deal directly with health and health care delivery systems. Futhermore, the developing structure of the model cities program indicates an even deeper, more direct concern for community health. It is with these relationships in mind that a general study of health services was undertaken. (Author)

PB-183 022
RAND Corp., Santa Monica, Calif.
MANPOWER PROGRAMS AS MARKOV
CHAINS.
Interim rept.,
E. P. Durbin, Oct 68, 36p RM-5741-OEO
Contract OEO-4191

Descriptors: (\*Personnel management, Mathematical models). Manpower. Training. Probability. Information theory, Matrix algebra. Systems engineering, Analysis. Identifiers: Markov chains.

This memorandum indicates how manpower training programs can be viewed as Markov processes, and discusses the utility of such a conceptual description. The intent is to provide a sufficient descriptive framework both to indicate future research direction and to allow program evaluators to proceed from data collection to program comparison. (Author)

PB-183 125 Bureau of Labor Statistics, Washington, D. C. THE FORECASTING OF MANPOWER REQUIREMENTS.

Apr 63, 101p BLS-248

Descriptors: (\*Manpower, Predictions), Labor, Economics, Employment, Statistical analysis. Identifiers: Manpower requirements, Manpower resources, Manpower estimates.

The manual was prepared in the Bureau of Labor Statistics' Division of Foreign Labor Conditions and is intended to serve as a guide in forecasting the manpower requirements associated with economic development. The method outlined is based largely on United States experience. However, the author has suggested modifications of the techniques used in the United States, based upon a study of forecasting techniques employed in different countries. (Author)

PB-183 133 Bureau of Labor Statistics, Washington, D. C. HOURS OF WORK AND OUTPUT.

1947, 168p Bull-917

Descriptors: (\*Personnel management, optimization). Ti.me, Scheduling, Industrial production, Motivation, Attitudes, Efficiency, Fatigue (Physiology). Job analysis, Sex, Automation. Human engineering. Identifiers: Absenteeism.

Generally speaking, the study indicates that everything else being equal, the 8-hour day and 40-hour week are best in terms of efficiency and absenteeism and that higher levels of hours are less satisfactory. The results of the same increases in hours may vary widely according to the physical exertion required and the degree of control which the worker has over the job. (Author)

PB-183 134
Bureau of Labor Statistics, Washington, D. C.
HEALTH MANPOWER: 1966-75 A STUDY OF
REQUIREMENTS AND SUPPLY,
Neal H. Rosenthal, Annie Lefkowitz, and Michael
Pilot. Jun 67, 53p BLS-323

Descriptors: (\*Medical personnel, \*Manpower studies), Labor, Statistical analysis. Predictions. Identifiers: Projected estimates, Manpower requirements, Manpower estimates.

The first part of the report focuses on the medical and health services industry. It includes a discussion of 1966 employment and shortages and projected 1975 manpower requirements. The second part of the study is about health occupations, and also presents information on 1966 employment and shortages and projected 1975 manpower requirements. In addition, it includes a discussion of the projected supply of health workers, an analysis of supply and demand, and recommendations on how supply can be expanded to meet projected needs. (Non-health occupations in the medical and health services industry are not discussed separately; they are only a small part of the Nation's total employment in those occupations, and their training is not significantly different from their training in other industries.) Following the body of the report are several appendixes, including statustical tables, a discussion of the methodology used to develop the projections, and a selective bibliography of health manpower studies. (Author)

PB-183 135 Bureau of Labor Statistics, Washington, D. C. TECHNICIAN MANPOWER: REQUIREMENTS, RESOURCES, AND TRAINING NEEDS.

Jun 66, 112p Bull-1512

Descriptors: (\*Technicians. Manpower studies). Education, Employment. Training. Statistical analysis, Predictions.



Identifiers: \*Manpower requirements, \*Manpower resources, Projected estimates.

The report presents the results of a comprehensive study of current and future technician manpower conducted by the Bureau of Labor Statistics. Emphasis is placed on the ways in which persons are trained for technican jobs, and on the projected supply and demand for these workers. Extensive information also is presented on the personal and educational characteristics of techni-cians and the nature of their work. (Author)

North Carolina Manpower Development Corp.. Durham. JOB DEVELOPMENT SURVEY.

Feb 68, 93p Grant OEO 8735

Descriptors: (\*Job analysis, \*North Carolina), Industries, Urban areas, Rural areas, Industrial training, Manpower studies, Statistical processes, Classification, Questionnaires, Predictions. Identifiers: Interviews.

The purpose of this study is three-fold. The first part outlines in detail the various elements of job development and their relation to the various stages of related manpower programs. The second part is a detailed 'how to do it' outline of job development and techniques. The third part is a detailed analysis of information resulting from a survey of 2,900 North Carolina employers. (Author)

PB-183 195

TECHNOMICS, Inc., Santa Monica. Calif.
THE ROLE OF THE CITY UNIVERSITY OF
NEW YORK IN MEETING HEALTH PROFESSION MANPOWER NEEDS,
Robert B. Parks, Elias H. Porter, and Marian M.

Wood.-15 Jan 68, 83p Grant OEO-8783

Descriptors: (\*Medical personnel, Training), (\*Programmed instruction, Universities), Leadership, Public health, Medicine, Predictions, Budgets, Nurses, Dental personnel, Medical technicians, Management planning, New York. Identifiers: Health care, Objectives, Curricula.

The concept of allied health professions, coupled with that of team training and team service, all under the leadership of traditional medicine, calls for an educational program to accompany the pro-gram of comprehensive health services for the entire population. Universities throughout the country must be responsive to the health care service needs in the community as a whole--a relatively new perspective in medical education not yet well translated into the academic process.
(Author)

PB-183 258

Atlantic Research Corp., Washington, D. C. Geor-

Atlantic Research Corp., Washington, D. C. Georgetown Research Project.
AN ANALYSIS OF POST-WORLD WAR II MANPOWER RESEARCH, POLICY AND PROGRAM EXPERIENCE APPLICABLE TO CURRENT MANPOWER PLANNING FOR PEACETIME CONVERSION OF MILITARY MANPOWER TO CIVILIAN OCCUPATIONS.

Oct 68, 357p1

Sponsored in part by Dept. of Labor, Washington, D. C. Manpower Administration.

Descriptors: (\*Military personnel. \*Manpower studies), (\*Civilian personnel, \*Personnel manage-ment), Manpower, Management planning, Transfer of training, Rehabilitation, Labor, Education, Training. Employment, Government employees, Statistical analysis.

Contents: Labor mobility--impeding and facilitating factors; Vocational education and training; The job market; Civilian employment experiencetransferability of occupational skills and knowledges; The disabled; Policy and program framework.

PB-183 301

California Univ., Los Angeles. Graduate School of **Business Administration** 

AN INVESTIGATION OF TASK ALLOCATION DECISIONS IN AUTONOMOUS WORK DECISIONS IN AUTONOMOUS WORK GROUPS IN A CONTINUOUS PROCESS INDUS

Doctoral thesis Gerald Isaiah Susman, 1968, 167p

Descriptors: (\*Personnel management, Industrial plants), (\*Job analysis, Standards), Group dynamics, Decision making, Classification, Compatibility, Management engineering, Efficiency, Performance (Human), Manpower studies, Theses. Identifiers: Autonomous groups, Continuous process methods.

The dissertation investigates industrial work groups whose membership is allowed to make their own decisions concerning task allocation. The problem under consideration is to isolate the variables which relate to task allocation decisions. These variables concern the criteria which serve as a basis for allocation decisions and the positive and negative consequences these group decisions have with regard to managerial objectives.

PB-184 366

PB-184-300 System Development Corp., Santa Minica, Calif. INITIAL ANALYSIS OF HEALTH PROFES-SIONAL SURVEY: MOUNTAIN STATES RE-GIONAL MEDICAL PROGRAM (WICHE),

Alfred Parsell, and Harold Borko. 16 Sep 68, 89p SDC-TM-4050

Sponsored in part by Western Interstate Commission for Higher Education (WICHE). Regional Medical Programs.

Descriptors: (\*Education, \*Public health), (\*Medical personnel, Attitudes), Questionnaires, Heart, Cancer, Cerebrovascular system, Nurses, Medical technicians, Pathology, Dental personnel, Statistical data, Idaho, Montana, Nevada, Wyoming. Identifiers: WICHE (Western Interstate Commission for Higher Education), Western Interstate Commission for Higher Education, Cerebral vascular accidents.

The report documents the results of a survey of health professionals conducted by the mountain states regional medical program (RMP). The survey, which was concerned with health care needs specific to heart disease, cancer, and stroke, was addressed to workers in the health professions throughout the mountain states region-consisting of the states of Idaho, Montana, Nevada and Wyoming. (Author)

PB-184 711

Arkansas Univ., Little Rock. Drug Systems Research. THE DEMONSTRATION AND EVALUATION

OF AN EXPERIMENTAL MEDICATION SYSTEM FOR U.A.M.C. HOSPITAL VOLUME

Kenneth N. Barker. Jul 67, 416p Grant PHS-HM-00323-01 See also Volume 2, PB-184 712.

Descriptors: (\*Chemotherapy, \*Hospitals), (\*Automation, Hospitals), Costs, Experimental design, Feasibility studies, Efficiency, Drugs, Distribu-tion, Personnel, Data processing systems, Packaging, Systems engineering.
Identifiers: UAMC (University Arkansas Medical

Center), University Arkansas Medical Center.

The report describes an attempt to install, demon-The report describes an attempt to install, describes strate, and evaluate a new experimental medication system developed for the University of Arkansas Medical Center Hospital (329 beds). kansas Medical Center Hospital (329 beds). Characterizing features of the experimental system were the incorporation of the centralized unit-dose dispensing and the editing center con-cepts, plus the use of unit record data processing equipment. A chapter entitled Background is included to provide perspective. Next the experi-mental system is described, first in a general and simplified way and then a second time in considerable detall with illustrations. Simplified flow diagrams of the control and experimental systems appear at the front of the chapter, as do floor plans. The following chapter examines the performance of two particular components of the experimental system, dispensing and editing-data processing. The evaluation programs-medication errors, work measurement, attitudes, costs and legal-are introduced in the next chapter which in-cludes a discussion of some of the general considerations in the overall approach to the evalua-tion of the two systems. Each evaluation program is then presented in its own chapter, each representing a separate study designed and conducted by a different investigator.

PR-184 712

Arkansas Univ., Little Rock. Drug Systems Research

THE DEMONSTRATION AND EVALUATION OF AN EXPERIMENTAL MEDICATION SYSTEM FOR THE U.A.M.C. HOSPITAL. VOLUME 2,

Kenneth N. Barker. Jul 67, 396p Grant PHS-HM-00323-01 See also Volume 1, PB-184 711.

Descriptors: (\*Chemotherapy. \*Hospitals), (\*Automation, Hospitals), Costs, Experimental design, Feasibility studies, Efficiency. Drugs, Distribution, Personnel, Data processing systems, Packaging, Systems engineering. Identifiers: UAMC (University Arkansas Medical Center), University Arkansas Medical Center.

The volume includes an account of the legal evaluation of the system. An examination is also made of the demands (workload) put upon the two systems during their respective evaluation periods to determine the extent to which this factor may have influenced the results. An interpretation is made of the combined results in terms of recommendations for U.A.M.C. Hospital.

PB-186 278

Wisconsin Univ., Madison. Center for the Study of Productivity Motivation.

INCENTIVE MANAGEMENT FOR HOSPITALS. J. J. Jehring. Sep 69, 111p
Proceedings of Conference, Wisconsin Univ., Madison 5-6 Jun 68.

Descriptors: (\*Hospitals, \*Management engineering), Costs. Management control systems, Management planning, Symposia, Personnel management, Motivation, Social psychology.

The cost of hospital care is the most rapidly rising component of the price index. On June 5 and 6, 1968, at a University of Wisconsin Conference, experts discussed new approaches that might be considered in dealing effectively with controlling costs. Hospital administrators and managers who costs. Hospital administrators and managers who were currently working on some of these new techniques exchanged experiences. The following is a table of contents of the proceedings of the Conference: The Impact of Motivation on Hospital Management, David E. Schrieber; Systems Incentives in the Nonprofit Hospital, J. J. Jehring; Incentive System at Long Beach Memorial Hospital, Donald Carner; Subsystem Incentives at Baptist Hospital, Pensacola, Florida, John Schill; Management by Objectives, David E. Schrieber; A Look to the Future, Edward J. Connors; and Appendix-Baptist Hospital Data. The nors; and Appendix-Baptist Hospital Data. The discussions of these papers are also presented in

this volume. The Conference was sponsored by the Center for the Study of Productivity Motivation, Graduate School of Business, University of Wisconsin; Management Institute, University Extension, University of Wisconsin; and Wisconsin Hospital Association. (Author)

PB-186 459
Bowling Green State Univ., Ohio.
THE EFFECTS OF WORK RATE UPON JOB SATISFACTION.
Doctoral thesis,
Stephen Wollack, Dec 69, 96p

Descriptors: (\*Personnel management, Impact), (\*Attitudes, Analysis), Performance tests. Correlation techniques. Employee relations. Motivation, Fatigue (Physiology), Assembling, Visual inspection, Research program administration, Automation. Theses.

Identifiers: Job satisfaction, Working rate (Human), Boredom.

Increased job mechanization frequently has resulted in some loss of control by the worker over his work pace. The extent to which a worker is able to control his work pace is one variable which seems to be related to job satisfaction. This study was intended to determine whether a relationship can be demonstrated between an individual's preferred rate of work on a specific task (self-pace), the rate of work as dictated by the task (assigned-pace), and job satisfaction. (Author)

PB-187 702
Harvard Univ., Cambridge, Mass.
CONCEPTS AND MEASUREMENTS FOR MANPOWER AND OCCUPATIONAL ANALYSIS,
James G. Scoville. Sep 69, 210p
Report on Research on the Conceptual Bases and

Report on Research on the Conceptual Bases and Uses of Various Manpower, and Occupational Systems. Sponsored in part by Department of Labor, Washington, D.C.

Descriptors: (\*Job analysis, Research program administration). (\*Personnel management. theory). Statistical data, Problem solving, Quality control. Cost effectiveness, Models (Simulations). Public relations, Correlation techniques. Data processing systems. Management planning. Manpower, Industrial relations. Identifiers: Concepts.

In recent years, considerable improvements have been made in the occupational data available for public use. The report tries to go beyond the stage of a user's handbook and to explore a number of related problems in the theory and measurement of work. The report covers several frequently used classification systems, considering their conceptual basis and the practical shortcomings which characterize them. Attention is addressed to development of an economic theory of the determination of the content of jobs and the relationships between various jobs within and between employing units. The desirable items of data to be collected are summarized in the light of the model, public policy information needs, and the goal of utility to researchers in general. (Author)

PB-187 877
Johns Hopkins Univ., Baltimoré, Md.
HEALTH SERVICES RESEARCH,
Donald Mainland. 1968, 538p\*
See also PB-187 725. Pub. in Milbank Memorial
Fund, 1967.

Descriptors: (\*Public health. Scientific research). Management engineering. Management planning. Hospitals. Economics. Population. Social sciences. Urban areas.

Contents: Influence of social and economic research on public policy in the health field; Research into the organization of community health service agencies: Why people use health

services; Research on the demand for health services; Evaluating the quality of inedical care; Research into hospital management and organization; Facilities and equipment for health services needed research; The political ingredient of public health services; Some implications of organization theory for research on health services; The contribution of health services to the American economy; Research into the organization of medical practice; Research into manpower for health service; Research problems in evaluation of health service demonstrations; The concept of need for health services; Comments on the health services research; Health services research in Scandinavia.

PB-188 302
RAND Corp., Santa Monica, Calif.
LIFETIME EARNINGS AND PHYSICIANS'
CHOICE OF SPECIALTY,
Frank A. Sloan. Dec 69, 23p P-4068-1
Sponsored in part by Public Health Service,
Washington, D.C.

Descriptors: (\*Medical personnel, Motivation), Job analysis, Money, Mathematical models. Regression analysis, Correlation techniques, Attitudes, Decision making. Identifiers: Professional specialization, Lifetime earnings.

The objective of the study is to determine whether lifetime earnings in various specialties influence physicians' choice of field. If income does affect these choices, what is the magnitude of the supply response. Although income payments to practicing physicians in certain specialties felt to be shortage fields may be a politically infeasible policy instrument for influencing specialty choice, increases in residents' salaries could have some appeal for legislators. The effectiveness of both policies is evaluated. (Author)

PB-189 728
Rural Affairs Study Commission, Richmond, Va.
NOTES ON HEALTH CARE IN RURAL VIRGINIA,
Richard Powers, and Michael Daugherty, 1969,
422

See also Summary report, PB-189 729.

Descriptors: (\*Medicine, \*Virginia), (\*Public health, Rural areas), Organizations. Costs. Medical laboratories, Management planning, Hospitals, Epidemiology, Medical personnel, Reviews. Identifiers: Health care.

The Rural Affairs Study Commission, created to study the utilization of the resources of rural Virginia, has specified twelve study subjects as areas of its concern. The subject covered in the document is health care. It inquires into how the state is organized to provide health care services to rural Virginians, and the level of health delivery services to the less densely populated areas of the state. (Author)

PB-189 729 Rural Affairs Study Commission, Richmond. Va. NOTES ON HEALTH CARE IN RURAL VIR-GINIA. SUMMARY.

1969, 10p See also detailed report, PB-189 728.

Descriptors: (\*Medicine, \*Virginia), (\*Public health. \*Rural areas), Reviews, Costs, Management planning, Urban areas, Budgets, Organizations, Medical personnel. Identifiers: Health care.

In dealing with the study of health care in the state of Virginia, the document is concerned with the analysis of two areas: the present organization of the state in providing health care services to rural Virginians, and the comparative level of health delivery services in the urban and rural areas of the state. (Author)

PB-190 390

Baruch Coll., New York, Center for the Study of Urban Problems.
STUDIES IN THE USE OF HEALTH SERVICES BY FAMILIES ON WELFARE: UTILIZATION BY PUBLICLY -ASSISTED FAMILIES, Richard Pomeroy, Robert Lejeune, and Lawrence Podell. 1 Apr 70, 203p NCHS-RD-70-4 Grant PHS-CH-00369
See also PB-190 391 and PB-190 392.

Descriptors: (\*Public health, \*Sociology). Culture. Population. Behavior. Attitudes. Economics, New York, Urban areas, Statistical data. Identifiers: \*Social welfare. \*Demographic surveys.

The report examines the personal, social, and cultural characteristics related to the utilization of health resources by a sample of 2179 New York City welfare mothers. Such a sample is of particular interest for the analysis of medical attitudes and behavior in that public assistance recipients can be regarded as relatively homogenous in their socio-economic status and their medical treatment is provided without financial cost of them. Thus the conventional economic determinants of medical behavior should be minimized in their effect. Throughout the discussion to follow the utilization behavior of this sample will be compared to that of other populations. However, caution must be exercised in such comparisons. In addition to their status as-welfare recipients, our sample differs from others in its reliance on medical care provided by clinics rather than by private physicians. (Author)

PB-191 035
National Center for Health Services Research and Development, Arlington, Va.
SUMIMARY OF STATE-OF-THE-ART WORKSHOP ON PAPANICOLAOU SMEAR-ANALYSIS, Diane M. Ramsey-Klee. Apr 70, 58p NCHS-RD-70-2

Descriptors: (\*Cancer, Detection), (\*Reproductive system, Cancer), Females, Biological laboratories, Automation, State-of-the-art reviews, Instrumentation, Feasibility studies, Pathology, Cytology, Identifiers: \*Papanicolaou smear.

Contents: Cytopathologists' criteria for malignant cell recognition: Cell descriptions by the syntactic method: Scanning devices: History of the cytoanalyzer and problems encountered in automating papanicolaou smear analysis; Automated malignant cell search; Multiparameter spectrophotometric measurements in rapid flow systems; Prescreening of cervico-vaginal washings with the cell volume profile method; Automatic analysis of cellular images by TICAS; Scanning with the vidisector; Recent experiences with a multiparameter rapid flow screening system for malignant cells in sputum; Historical development of cytologic automation.

PB-192 151
Yale Univ., New Haven, Conn.
THE NURSING SHORTAGE AND PUBLIC POLICY, AN ECONOMIC ANALYSIS OF THE DEMAND FOR HOSPITAL NURSES IN CONNECTICUT.
Doctoral thesis,
Barbara Holtz Kehrer, 1970, 273p
Grant DL-91-07-67-38

Descriptors: (\*Nurses, Manpower studies). (\*Public health, Management planning). (\*Manpower studies, \*Connecticut), Quality control. Abundance, Wages, Statistical data, Regression analysis, Correlation techniques, Training. Identifiers: Manpower shortages. Demand (Economics).

The document reports on a series of studies covering the demand, supply, training, criteria, and



utilization of registered nurses in hospital activities in Connecticut.

PB-192 276

Iowa State Univ., Ames. Industrial Relations Center.

AN ANALYSIS OF IOWA'S JOB TRAINING PRIORITIES BASED ON MANPOWER PRO-JECTIONS FOR 1975, Catherine A. Palomba, 1970, 171p

Descriptors: (\*Industrial training, \*Iowa), (\*Job analysis, Statistical data), (\*Employment, Mathematical prediction), Industries, Manpower, Data processing systems, Regression analysis, Scheduling, Classification, Advanced planning, Mathematical models, Theses. Identifiers: Priorities

The question of training priorities is of importance to all who have the responsibility of planning rducation and training programs. The purpose of this study was to develop projections of occupational manpower requirements for Iowa for 1975. Using 1960 Iowa census data as a starting point a matrix of 165 occupations and 64 industries was developed. Regression estimates were then used to obtain projections of employment requirements to 1975. Projections of occupational requirements in total and by industry were obtained. (Author)

Minnesota Dept. of Health, Minneapolis. Section of Mursing.

INCREASING THE AVAILABILITY OF PUBLIC HEALTH-NURSES IN RURAL SETTINGS IN

MINNESOTA.
Rept. for 1 Oct 65-30 Dec 68,
Francis Decker, and Alberta P. Wilson, Jul 70, 154p HSRD-70-16 Grant PHS-CSP-69477-03-68-22

Descriptors: (\*Nurses, \*Public health), (\*Rural areas, Nurses), (\*Minnesota, Nurses), Recruiting, Sociology, Population, Training, Economics.

Identifiers: \*Health Services Research and Development, \*Demography.

The shortage of prepared public health nurses is particularly acute in rural areas and Minnesota is largely rural in economic and political structure.

As is true with other professional groups, the movement of the general population toward urban centers has had an adverse effect upon the availa-bility of public health nurses in the rural areas of Minnesota. The rising number of vacant public health nursing positions in out-state areas, hindering the expansion of community services, indicated that special efforts were needed to attract more nurses into public health. Since the public health nursing staffing problem in Minnesota was most acute in the rural areas, it was decided to focus efforts in that direction. Hence, a project was developed with the purpose of improving, both quantitatively and qualitatively, the staffing of rural public health nursing agencies in Minnesota. (Author)

PR-192 690

Nathan (Robert R.), Associates, Inc., Washington,

TRANSFERABILITY OF MILITARY-TRAINED MEDICAL PERSONNEL TO THE CIVILIAN SECTOR

Jul 70, 339p\* Contract DL-81-09-68-01

Descriptors: (\*Medical personnel, Military training), (\*Transfer of training, Public health), Feasibility studies, Factor analysis, Attitudes, Classification, Motivation, Decision making, Job analysis, Wages, Manpower studies.

The exploding demand for medical and health services and evolving changes in the systems for delivering them have been accompanied by widespread shortages of many kinds of personnel, professional and subprofessional. There is increasing interest in a large potential, but mainly untapped, source of supply: the veterans of the Armed Forces who received specialized medical training and experience while in service. The report presents the findings of a study of this supply, undertaken to determine the labor market characteristics of the men who comprise the supply; the extent of their transferability and transfer to civilian medical/health employment after their release from the Armed Forces; the reasons why more of them did not transfer; and the conditions under which the transfer rates might might be raised. (Author)

PIL 103 KR1

Stanford Research Inst., Menlo Park, Calif. COST AND OPERATIONS ANALYSIS OF AU-TOMATED MULTIPHASIC HEALTH TESTING, Interim rept.

Joseph H. Chadwick, James J. DeLang, Murray Greyson, J. David Reed, and William F. Rousseau. Dec 69, 232p° SRI-RM-8063-2 HSRD-70-23 Contract HSM-110-69-411 See also PB-193 880

Descriptors: (\*Medical examination, Automatic control), (\*Cost analysis, Medical examination), Models, Substitutes, Height, Weight measure-ment, Questionnaires, Electrocardiography, ment, Questionnaires, Electrocardiography, Dentistry, X ray inspection, Clinical medicine, Saliva, Histology, Computer programming. Identifiers: "Health services research and development, Multiphasic health testing, "Automatic health testing, Papanicoloou smear, Health screening, Cost models.

The report describes the development of cost-finding procedures for multiphasic health testing with specific reference to four major testing centers.

September 69.

National Center for Health Services Research and Development, Rockville, Md. INQUIRY. VOLUME VII, NUMBER 1, MARCH 1970, SPECIAL ECONOMICS. ISSUE: MEDICAL Rept. for 28 Jun-21 Nov 69.

Mar 70, 138p HSRD-70-24 Contract PHS-HSM-110-69-209 Papers presented at the Medical Economics Workshop, University of Iowa, Iowa City, 15-19

Descriptors: (\*Economic analysis, \*Medical services), (\*Hospitalizing, \*Cost analysis), Public health, Hospitals, Medical personnel, Salary surveys, Expenses, Economic factors, Economic Identifiers: \*Health services research and development, \*Medical economics. \*Health care

Contents: Improving the health services system through research and development; Increase in the cost of physician and hospital services; Philosophy, faith, fact and fiction in the production of medical services; Allied health manpower; Product heterogeneity and hospital cost analysis; Causes and consequences of salary differentials in nursing; An appraisal of physician manpower pro-jections; and Efficiency, incentives and reimbursement for health care.

PB-195 132

Geomet, Inc., Rockville, Md. A COMPUTER SIMULATION MODEL FOR EVALUATION OF THE HEALTH CARE DELIVERY SYSTEM, Final rept. 18 Apr 69-17 Apr 70, George H. Milly, and Leon S. Pocinki, Jun 70, 260-110 Dec. 110 250p HSRD-70-15 Contract HSM-110-69-86

Descriptors: (\*Medical services, \*Systems analysis), Computerized simulation, Data processing, Public health, Communities, Information systems, Medical records, Economic analysis, Cost estimates, Cost engineering, Medical personnel, Evaluation, Development.

Identifiers: \*Health services research and

development, "Health care delivery systems.

The report is phase 1 in the development of a ranked set of viable alternative health care delivery systems. The goal for this first year's effort was the development of a structure for a simulation model of the health care delivery system. Results of the following specific tasks are described: establishing an interdisciplinary team, model building, and data acquisition and processing. This report also proposes the application of systems analysis techniques to the development and testing of alternative health care delivery systems. The report demonstrates the feasibility of leveloping evaluation methods, including a simulation model, the definition of system boundaries, the community, and external constraints. For each major element of the system: population, the delivery system, costs, and finance, a conceptual model has been developed with input requirements and resulting outputs. Conceptual case-types are presented. The physical unit of the system is defined as a service-treatment station, and this concept is explored in detail. (NCHSRD abstract)

PB-195 421 Florida Univ., Gainesville. Regional Rehabilitation Research Inst

A METHODOLOGY FOR OPTIMIZING THE TRAINING AND UTILIZATION OF PHYSICAL

THERAPY PERSONNEL, Neil S. Dumas, and John E. Muthard. 1 Apr 70, 65p° Mono-4 SRS-RD-2870A Sponsored in part by Dept. of Health, Education, and Welfare, Washington, D.C.

Descriptors: (\*Physical therapy, Medical personnel), (\*Medical personnel, Training), (\*Manpower utilization, Medical personnel), Optimization, Job analysis, Classification, Medical equipment, Data processing systems, Test construction (Psychologv). Performance evaluation. Identifiers: \*Physical therapists.

A method for analyzing the work in a department of physical therapy was devised and applied in a teaching hospital. Physical therapists, trained as observer-investigators, helped refine the coding system and were able to reliably record job behavior in the physical therapy department. The nature of therapist's and aide's job was described and inclinations of the state of and implications for physical therapy practice and academic preparation drawn. Therapists' judgments provided a basis for describing tasks which might readily be incorporated into the work of a trained physical therapy assistant. (Author)

PB-195 442

Florida Univ., Gainesville. Regional Rehabilitation Research Inst. THE DECISION MAKER'S GUIDE

Neil S. Dumas. Feb 70, 189p SRS-RD-2870 Sponsored in part by Dept. of Health, Education, and Welfare, Washington, D.C.

Descriptors: (\*Decision making, (\*Management engineering, Information systems), (\*Bibliographies, Decision making), Indexes (Documentation), Abstracts, Information (Documentation), Abstracts, Information Retrieval, Computer programming, Evaluation, Analyzing Identifiers: Annotated bibliographies.

The Guide is an attempt to provide decisionmakers with a simple source comprising the most commonly sought experiences literature. Over 1200 articles were selected from accounting, banking, business administration, data processing, marketing, operations research, personnel and psychological journals. A comprehensive 5,000 item subject index and abstracts are given. The



document is intended to help insure that important decisions are made 'right' the first time. (HEW ab-

PB-1% 000

National Center for Health, Services Research and Development, Rockville, Md. PROVISIONAL GUIDELINES FOR AUTO-MATED MULTIPHASIC HEALTH TESTING AND SERVICES. VOLUME 2: OPERATIONAL PRINCIPLES

Morris F. Collen, Robert Feldman, Joseph Barbaccia, James Dunn, and Richard Greenblatt. 1970, 105p\* HSRD-70-38

Errata sheet inserted. Report of the AMHTS Advisory Committee to the National Center for Health Services Research and Development. See also Volume 1, PB-195 654.

Descriptors: (\*Medical services, Automation), (\*Information systems, Medical services), (\*Medical examination, Automation), Information centers, Information retrieval, Computers, Data processing. Medical records. Evaluation, Systems engineering. Medicine, Diagnosis. Quality control. Identifiers: \*Health services research and development. \*Automatic multiphasic health testing and services.

This is the second volume of a 3-volume series titled 'Provisional Guidelines for Automated Multiphasic Health Testing and Services, prepared by the Center's AMHTS Advisory Committee. It reviews operational principles and quality control. Automated Multiphasic Health Testing and Services (AMHTS) is the use of automated tests and measures to detect probable early (presymptomatic) disease and consequent diagnostic examinations and services. AMHTS has been principally developed and used by industrial and pre-paid group health plans as an expeditious way of providing preventive health care. NCHSRD is determining the feasibility of adopting AMHTS to Federal health programs and is conducting long-term epidemiological, biomedical, economic investigations. behavioral, and technologic (Author)

PB-196 997

American Board of Pediatrics, Evanston, Ill. Sub-Board of Pediatric Cardiology.

EVALUATION OF PEDIATRIC CARDIOLOGY TRAINING AND TESTING.

Final rept.. F. H. Adams, J. W. DuShane, S. Blumenthal, P. R. Lurie, and D. G. McNamara. 1967, 224p PH-43-67-

Contract PH-43-67-1452

Descriptors: (\*Pediatrics, Cardiology), (\*Cardiology, Education), Medical personnel, Children, Heart, Evaluation, Projects. Identifiers: \*Pediatric cardiology.

The specialty field of Pediatric Cardiology was studied in depth in relation to need, training, and evaluation of training. Ninety-three percent (93%) of the diplomates certified prior to 1967 par-ticipated in the study. Their demographic charac-teristics are described. The roles of a pediatric cardiologist were determined by three separate techniques which produced similar results: daily diaries; professional workshops; observation of professional activities. From the studies, a defini-tion of a pediatric cardiologist was derived. Previous written examinations and oral examinations were evaluated. The results of these findings plus the determination of roles of a pediatric cardiologist stimulated the development of new testing and evaluation procedures. New criteria and standards for training programs in pediatric cardiology were developed. A projection of the need for pediatric cardiologists by the year 1980 was determined. It is concluded that the current number of candidates certified annually is inadequate to meet this proPR-197 244

PB-197 244
Purdue Univ., Lafayette, Ind.
PSYCHOLOGICAL AND ORGANIZATIONAL
CORRELATES OF CAREER PATTERNS IN
CLINICAL LABORATORY OCCUPATIONS. Doctoral thesis. Thomas Anthony Jeswald. Jan 71, 127p

DLMA-91-16-70-26-1 Grant DL-91-16-70-26

Career patterns.

Descriptors: (\*Medical personnel, \*Job satisfaction), (\*Attitude surveys, Medical personnel). Motivation, Questionnaires. Personnel management, Recruiting, Hospitals, Iilinois, Indiana, Management, Theses, Earnings, Education, Supervision.
Identifiers: \*Clinical laboratory occupations.

The purpose of the project was to provide research data concerning attitudes and satisfac-tions of present clinical laboratory employees which would be helpful in planning future recruitment and retention efforts for the occupational field. Questionnaires requesting information re-garding the personal and work histories, work attitudes, career plans, and need satisfaction of each respondent were sent to the administrators of 124 hospitals in Illinois and Indiana to be distributed to their laboratory employees. A total of 1.617 forms were returned. A separate questionnaire was were returned. A separate questionnaire was completed by 66 clinical pathologists to determine administrative goals and attitudes toward subordinate laboratory staffs. (DLMA abstract)

PB-197 690

Columbia Univ., New York, Dept. of Sociology.
THE DEVELOPMENT OF OCCUPATIONS IN HEALTH TECHNOLOGY.

Doctoral thesis. Carol Anderson Brown. 1971, 379p DLMA-91-34-Grant DL-91-34-68-20

Descriptors: (\*Manpower utilization, Government policies), (\*Medical personnel. Manpower utiliza-tion). Job analysis. X ray apparatus. Medical Job satisfaction. Attitudes. laboratories. Sociopsychological surveys, Hospitals. Educa-tion, Legislation, Political objectives, New York, Questionnaires, Theses.

Identifiers: \*Health manpower, Licenses, Occupational structure, New York City (New York), Long Island.

The study examined the general question of how the place of an occupation in the economic diviof labor becomes shaped and defined. The shaping was seen as basically a political process. a utilization of power in various forms by interested parties acting with the conscious intention of gain-ing control over the economic activity of them selves and others for the sake of economic benefits. The study examined the health industry. as a whole and, specifically, two sub-sectors, the fields of x-ray technology and clinical laboratory technology. Two recently passed licensing laws were examined the licensure of x-ray technicians in New York State and the licensure of clinical laboratory technicians in New York City. A small survey of technicians in five hospitals in New York City and Long Island indicated their at-titudes toward their occupations. (DLMA ab-

PB-197 740

Columbia Univ., New York. MANPOWER SUBSTITUTION IN THE HOSPITAL INDUSTRY: AN EXPLORATORY STUDY OF THE NEW YORK CITY VOLUNTARY AND MUNICIPAL HOSPITAL SYSTEMS. Final cent

Myron David Fottler, 1970, 325p DLMA-91-34-66

Grant DL-91-34-66-31 Doctoral thesis.

Descriptors: (\*Manpower utilization, \*Hospitals), (\*Medical services, \*New York), (\*Medical personnel, Manpower utilization), Manpower utilization tion. Skilled workers, Neighborhoods, Salaries. Work measurement, Unskilled workers, Statistical data, Cost analysis. Substitutes. Correlation techniques. Factor analysis, Theses. Identifiers: Health manpower, Technology. Hospital manpower.

The purpose of the study was to determine the degree of manpower complementarity and sub-stitutability of different qualities of labor, the causes of manpower substitution, and the implications of such substitution for the quality of hospital services. The New York City voluntary and municipal hospital systems were chosen for the analysis because the two systems operate under different incentives and constraints. Statistical data on the hospital skill level, size, case mix, case severity, technology, neighborhood characteristics, skilled wage rates, skilled workload, and costs per patient day were analyzed for both hospitals in 1955 and 1965. Various tests of the degree of manpower complementarity and substitutability were developed and applied in both hospital systems. The relationship between skilled labor shortages and manpower substitution was examined and the statistical relationship between the hospital skill level and other variables was tested for 1965. The relationship between hospital skill level and hospital quality was examined. (DLMA abstract)

PB-198 508

Johns Hopkins Univ., Baltimore, Md. Dept. of Behavioral Sciences.
NEW CAREERS IN HEALTH: ISSUES AND PROBLEMS. Richard T. Smith. Mar 71, 60p+ HSRD-71-4 Contract HSM-110-69-198

Descriptors: (\*Public health. \*Personnel development), (\*Economic development, Medical serrices), Meetings. Legislation. Financing, Education, Health, Government policies, Public opinion. Employment, Unemployment, Feasibility.

1 Jentifiers: "Health care services, "Health services research and development, Job creation. Health workers.

The 1966 New Careers Ammendment to the Economic Opportunity Act provided the strategy and funds for training health service paraprofessionals to increase health services and skilled employment opportunities for the 'disadvantages.' This four-year assessment of progress, problems and needs discusses health teams, education, and public and professional resistance. (HSRD ab-

PR-198 620

North Carolina Univ., Chapel Hill. Health Services Research Center.
NON PHYSICIAN PERSONNEL IN AMBULA-TORY CHILD HEALTH CARE: A REVIEW, Jana Mossey, and Sally Nicholson. Mar 71, 105p\* HSRD-71-7 Grant PHS-HS-00239

Descriptor.. (\*Public health, Personnel development), (\*Children, Public health), Education, Manpower utilization, Medical services.

Identifiers: \*Health services research and development, \*Health care services, Ambulatory child health care. Child health care services. Health workers.

Organization of services and types of personnel involved in giving child care have undergone many changes in recent years. Services rendered can no longer be described in terms of the hospital, the well child clinic and the doctor and the nurse. The review emphasizes trends in preparing and utilizing personnel for pediatric ambul tory care facilities. The material presented is a sample of existing patterns and proposed developments rather than a

comprehensive presentation of all relevant programs. Two specific areas were explored: details of the care setting and the specifics of the function, supervision, and educational requirements of allied health workers. Child health care programs are moving toward comprehensive care in a location accessible to the patient and administratively answerable to community needs. Includes an annotated bibliography of 72 citations and 4 appendices. (HSRD abstract)

PB-199 112

Hospital Research and Educational Trust of New Jersey, Princeton.
STUDENT HEALTH OPPORTUNITIES PROGRAM: A SUMMER YOUTH EMPLOYMENT PROGRAM.

Feb 69. 103p DLMA-92-32-70-01-1 Grant DL-92-32-70-01

Descriptors: (\*Employment, Students), (\*Students, Personnel development), (°Hospitals, Specialized training). Project planning, Reviews, Evaluation, Questionnaires, Manpower utiliza-

Identifiers: \*Summer youth employment programs, \*Disadvantaged groups.

The summer youth employment program discussed was designed to provide disadvantaged high school students with opportunities for selfnight school students with opportunities for self-development by exposing them to a variety of hospital-based health careers during the summer vacation period, and to stimulate interest in em-ployment in health services to help meet the grow-ing need for qualified personnel in this expanding industry. Included in the report is a history of the project, sections on selection of hospitals and students, program components, results and recommendations. The appendices include a model application form for students, reports of orientation meetings for hospital administrators and students. student questionnaire, hospital evaluations, and suggested guidelines for evaluation. (DLMA ab-

PB-199 118

Mobilization for Youth, Inc., New York, New Health Occupations Program.

ESTABLISHING A NEW CAREER: THE SO-CIAL HEALTH TECHNICIAN.

Final rept. 1966-1970. Anita S. Vogel. 1 Nov 70, 123p DLMA-82-34-69-Contract DL-82-34-69-18

Descriptors: (\*Public health, \*Employment), Personnel development, Placement, Unemployment, Specialized training.
Identifiers: Social health technician, Disadvantaged groups.

The monograph delineates the work carried out by the New Health Occupations Program whose ob-jective it is to work with city hospitals and private medical centers to restructure and improve the local health services delivery system in New York City, and in so doing open up new career opportunities in the health field to disadvantaged adults. The monograph relates how this program has resulted in the establishment of a new kind of health worker the Social Health Technician. trained to carry out a broad range of social service and health assignments. (Author)

PB-199 441

Medical and Health Research Association of New York City, N.Y. TOWARD A CAREER LADDER IN NURSING: UPGRADING NURSE'S AIDES TO LPNS THROUGH A WORK-STUDY PROGRAM. Final progress rept. Apr 67-May 70.

May 70, 61p DLMA-82-34-67-48-1 Contract DL-82-34-67-48

Descriptors: (\*Medical personnel, \*Personnel development), (\*Nurses, Personnel development). Specialized training. Employment, Upgrading, Motivation, Tests, Performance evaluation, Vocational guidance, Vocational interests, Education. Identifiers: "Nurse aides. Licensed practical nur-

The purpose of the project was to demonstrate the feasibility of upgrading Nurse's Aides to Licensed Practical Nurses through a part-time work, part-time training (work-study) program, linking up a major urban hospital system with an MDTA training program, under union sponsorship. The project provided remediation classes, high school equivalency classes, training allowances, and counseling. Candidates for the program were care-fully selected on the basis of achievement test scores, job evaluations, and attendance records. Additionally, a quota was established for each hospital, setting the number of aides who could enter training without seriously depleting the nursing staff. (DLMA abstract)

PB-200 160

Massachusetts Inst. of Tech., Lexington. Lincoln Lab. QUANTITATIVE INDICATORS OF FUNC-TIONAL DISEASE.

Project rept..
Theodore Nadelson, Margaret Flatley, and Don R. Lipsitt, 4 Mar 71, 27p ACP-19 HSRD-ACP-71-6 Contract HSM-110-69-264

Prepared in cooperation with Beth Israel Hospital. Boston. Mass.

Descriptors: (\*Psychosomatic disorders, Diagno sis), (\*Questionnaires, Psychosomatic disorders), Diseases, Medical examination, Psychology, Identifiers: \*Ambulatory Care Project. \*Health Services Research and Development.

Psychological questionnaires were administered to Psychological questionnaires were administrate to Screening Clinic patients to detect the presence of functional disease as an element in the presenting complaints of ambulatory patients. (Screening Clinic patients are those who are either new to the Beth Israel Hospital or have not been seen during beth Israel Prophia of the not occur seen during the preceding six-month period. Each patient is seen briefly by the medical resident in this clinic who, on the basis of a brief history and physical examination, refers the patient for further diagnostic or therapeutic activity.) The screening physician recorded his evaluation of the presence of functional or organic illness in the patient at that particular time. Six months later, a record review assessed the patient's course in the medical system and judged whether an organic or func-tional etiology was described for the chief complaint. These assessments were compared to the results of the psychological questionnaires. (Author)

PB-200 161

Massachusetts Inst. of Tech., Lexington. Lincoln

APPLICABILITY OF PROTOCOL MANAGE-MENT OF CHRONIC DISEASE TO AN AGED POPULATION.

G. A. Goldberg, Margaret Grady, and M. A. Budd. 8 Jul 70, 32p ACP-7 HSRD-ACP-71-1 Contract HSM-110-69-264

Prepared in cooperation with Beth Israel Hospital.

Descriptors: (\*Medical records. (\*Medical services. Medical records), Manageeneurcal services, Medical fecords), Management, Questionaires, Automation, Diagnosis, Public health, Age, Populations.

Identifiers: "Health Services Research and Development, "Ambulatory Care Project." Development. \*Ambulatory \*Protocols. \*Chronic diseases.

For the purpose of the further development of the chronic disease management portion of the ACS. certain data must be compiled relative to the prevalence of chronic disease both singly and in

combinations, as well as an indication of the frequency of patient visits for various chronic diseases (a variable influenced by disease severity and lability, among other factors). Such information would be useful in establishing priorities for the development of different chronic disease management protocols (vide infra). It would also assist in pre-trial estimation of the saving of physician visits likely to be achieved by instituting a program utilizing such protocols. (Author)

PB-200 453

Minnesota Univ., Minneapolis. PREDICTION MODELS FOR INSTITUTIONAL TRAINING PROGRAMS UNDER THE MAN-POWER DEVELOPMENT AND TRAINING

Final rept. Robert P. Trumble. Jun 71, 227p DLMA-91-25-70-

Contract DL-91-25-70-59

Descriptors: (Manpower utilization, Project planning), (\*Specialized training, Mathematical models), Personnel selection, Analysis of variance. Industrial training. Computer programming, Methodology, Quality control, Mathematical prediction. Ethnic groups. Sex. Psychometrics. Theses, Invividual differences.

Eight models for manpower utilization programs were developed that can indicate variables which differentiate successful MDTA trainees from unsuccessful, and that suggest program modifications in selection, placement, or services. (DLMA abstract)

PB-200 454

Derryck Associates. Inc., New York. MODERNIZING STAFF SELECTION PROCESSES IN THE STATE EMPLOYMENT SECURITY SERVICE AGENCY. Final rept.

Dennis A. Derryck, and Richard Leyes. Apr 70, 109p DLMA-81-34-70-23-1 Contract DL-81-34-70-23

Descriptors: (\*Manpower utilization, Organizations). (\*Personnel selection. Methodology), (\*State government. Project planning), Civil ser-vice. Job analysis. Aptitude tests. Recruiting. Promoting. Mathematical models, Personnel management.

A feasibility study was made to discover the types of selection and promotion models, strategies, and processes that must be employed if current State Employment Security Service Agency selection practices are to be made more directly relevant to the various populations currently being served. Specifically, the study sought to determine the constraints currently operating upon the selection processes in the various agencies; and the types of selection models, strategies, and processes that will aid in improving selection processes for pre-professional, professional, and executive positions and how this is accomplished in terms of internal promotions and outside recruitment. (DLMA abstract)

PR-200 455

Planning Research Corp., McLean, Va. SOCIAL SECURITY DATA: AN AID TO MAN. POWER PROGRAM EVALUATION. Interim rept..
William D. Commins. Nov 70, 49p PRC-R-1543
DLMA-81-05-68-06-1
Contract DL-81-05-68-06

Descriptors: (\*Manpower, \*\*Education), (\*Social security. Statistical data). Evaluation, Benefit cost analysis, Earnings. Economic analysis. Identifiers: On job training.



The report examines the potential of Social Security Administration data for manpower training evaluation. It assesses the utility of SSA data for comparing the economic gains of on-the-job training and institutional trainees before and after training. The methodology developed incorporates multiple correlation analysis, analysis of variance, and F-ratios and proportions of explained variation as measures of significance. The report notes general information about the nature and limitations of these data. Some of the problems of benefit measurement are discussed and a description of the data sources is provided. (Author)

PB-200 555
Planning Research Corp., McLean, Va.
A MODEL FOR MANPOWER TRAINING
EVALUATION,
Final rept.,
Dorothy Tella, Allen Dobson, and William
Commins, Nov 70, 81p PRC-R-1535 DLMA-81-0568-06-2
Contract DL-81-05-68-06

Descriptors: (\*Manpower utilization, Mathematical models), (\*Industrial training, Project planning), Evaluation, Economic models, Statistical znalysis, Services, Earnings, Sociometrics, Joh analysis, Identifiers: Management information systems.

The report describes a model that was designed to be useful to manpower program evaluation and for program and budget planning. It provides a framework for estimating the contribution of various individual manpower services in increasing the earning potential of manpower trainees with sets of demographic and socio-economic characteristics. The model shows how to maximize the total increase in output due to training by selecting the kinds of people to be trained and the kinds of services to be offered them. (DLMA abstract)

PB-201 175
Santa Clara County Medical Society, San Jose, Calif.
MILITARY HEALTH MANPOWER.
Final rept.

30 Jun 70, 44p DLMA-92-05-68-10-1 Contract DL-92-05-68-10

Descriptors: (\*Paramedical sciences. \*Manpower). (\*Medical personnel, Education). (\*Manpower utilization, \*Military personnel). Government policies Identifiers: \*Military service veterans. Medical corpsmen. Paraprofessional personnel.

A report is given of a project to demonstrate that a county medical society can be effectively used to develop an educational training program in health occupations for paramedical personnel upon discharge from the military service, and to initiate job placement and licensing for them. This was to be done in cooperation with local, state and national agencies concerned with health occupations. The project staff worked with state and local agencies to modify licensing procedures and to make provision for the utilization of trained military corpsmen. (DI.MA abstract)

PB-201 406
Holy Cross Hospital, San Francisco, Calif,
SCIENTIFIC DESIGN OF A HOSPITAL TRAINING SYSTEM.
Final rept. 1 Sep 67-Mar 70.
Rosalie Kasaba, and Becky Abato, Jul 71, 178p\*
HSRD71-15
Grant PHS-HS-00118

Descriptors: (\*Hospitals, \*Personnel development). Medical personnel, Performance evaluation. Performance standards. Management. Design. Planning, Education. Identifiers: Health services research and development, \*Hospital training programs.

The typical hospital service employee lacks standardized training and he stays for a short time. His replacement, though bearing the same job title, may have very different skills. Hospitals must respond by codifying jobs and providing the inhouse training to adequately fill them. This study, done by a general hospital, is based on definition of the total hospital functional structure and identification of its work components. It provides: performance standards, methods for measuring performance, and training programs to meet measured needs. (HSRD abstract)

PB-202 158
Department of Labor, Washington, D.C.
COST-BENEFIT ANALYSIS: THEORY AND AP-PLICATION TO MANPOWER TRAINING PRO-GRAMS, A BIBLIOGRAPHY.

May 71, 44p°
Current bibliographies prepared by the library, No. 3.

Descriptors: (\*Manpower, \*Education), (\*Benefit cost analysis, Bibliographies), Theories, Employment, Socioeconomic status, Identifiers: \*Manpower training.

Contents:

Theory and Methodology of cost-benefit analysis;

Application of cost-benefit analysis to manpower training programs - examples from reports of manpower development and training act programs and other related literature:

Bibliographies relating to cost-benefit analysis (both theoretical and applied) with special consideration given to manpower training programs.

PB-202 200
Richardson, Bellows, Henry and Co., Inc., Washington, D.C.
A STUDY OF THE FEASIBILITY OF PREDICTING JOB TENURE AMONG EMPLOYMENT SERVICE APPLICANTS THROUGH THE USE OF BIOGRAPHICAL INFORMATION.
Final rept.

Jul 71, 101p\* DLMA-82-09-69-32-1 Contract DI-82-09-69-32

Descriptors: (\*Employment. \*Performance evaluation), (\*Personnel selection. Forecasting). Negroes, Urban areas. Placement. Feasibility. Identifiers: \*Job tenure. Biographical information.

The report presents the findings of a research study which demonstrated the feasibility of the utilization of biographical information in the prediction of three month and six month employment tenure. The analysis sample included Black disadvantaged males (N=477) and females (N=225) in three cities who had received no previous manpower training and/or counseling services and who were placed by State Employment Service Offices into a varying range of manufacturing and service occupations at varying salary levels. (Author)

PB-202 #13
Optometric Center of New York, N.Y.
A NATIONAL STUDY OF ASSISTING MANPOWER IN OPTOMETRY.
Final rept..
Alden N. Haffner, Jerome Sherman, Michael H.

Allen N. Hattner, Jerome Sherman, Sitchaet B Heiberger, Richard C, Weber, and Edward R. Johnston, Aug 71, 234p DLMA-81-34-70-11-1 Contract DL-81-34-70-11

Descriptors: (\*Education, \*Technicians), (\*Optometry, \*Manpower), (\*Employment, Technicians), Job descriptions, Programs, Reguirements, Personnel development, Questionnaires, Statistical analysis, Identifiers: \*Health occupations.

As a basis for providing meaningful job opportunities for the disadvantaged in health occupations, the study has investigated the current number, duties, and education and training of ancillary optometric personnel and the projected need for such employees. A stratified sample of the Nation's practicing optometrists was surveyed by mailed questionnaires. Questions were designed to determine the present and potential utilization of ancillary optometric personnel and to reveal the relation of specific job tasks to requisite levels of education and training and capacity for independent action. This information, in turn, has permitted the grouping of job tasks into various job descriptions. (Author)

PB-302 896
Florence Heller Graduate School for Advanced a.
Studies in Social Welfare, Waltham, Mass.
CAREER PATTERNS OF WOMEN PHYSICTANS.

Final rept., Jane Gaudette Jones. May 71, 199p DLMA-91-23-66-59-1 Grant DL-91-23-66-59 Doctoral thesis.

Descriptors: (\*Females. Personnel development). (\*Physicians. Females). Manpower utilization. Education. Surveys. Decision making. Family relations. Statistical analysis. Pattern recognition. Questionnaires. Theses. Identifiers: Career patterns.

The author observes that although women constitute a source of candidates for medicine, the United States has made little attempt to draw talented young women into medicine except in times of crisis. Using the concept of career as developed by Everett Hughes, the exploratory study is focussed on the career line of 265 women (81 medical students, 184 graduate physicians) in order to examine the choices or decisions the woman made as the progressed through the institutionalized sequences of medicine. Also analyzed were non-institutionalized decisions such as marriage and childbearing. The study notes that women tend toward being an elite group, with the decision to study medicine congruent with family professional orientation. Stress and role conflict appear to accompany childbearing regardless of state of career.

PB-203 019
California Univ.. San Francisco. School of Pharmacy.

PB-005EFDINGS OF AN INVITATIONAL CON-

PROCEEDINGS OF AN INVITATIONAL CON-FERENCE ON PHARMACY MANPOWER, Joe B. Graber, and Donald C. Brodie. Sep 71, 143p\* HSRD-71-21 Grant PHS-HS-00577-01

Descriptors: (\*Pharmacy, \*Manpower utilization), Medical personnel. Medical services, Education. Meetings. Identifiers: \*Pharmacists. \*Health services research and development.

Pharmacists are professionally under utilized, despite the shortage of health manpower, but that new, essentially clinical roles, are emerging as the nation enters a period of comprehensive health care. These roles, which will depend on new pharmacist-physician relationships, must be identified, studied, and then demonstrated. Pharmacy school curricula, which has been static for some time, will have to reflect the expanded function of the pharmacist. Conference papers and discussions reviewed the following topics: The changing role of the pharmacist; the redefinition of the pharmacist role; the physician/pharmacist team in patient care; the pharmacist's role in drug efficacy control, educational programs for pharmacists: compatibility of physician and pharmacist education; pharmacy and the health care enterprise.

PB-204 597

Columbia Univ., New York, Bureau of Applied Social Research.
RESPONDENT/INTERVIEWER INTERACTION

THE RESEARCH INTERVIEW: AB-STRACTS.

Final rept. 29 Jun 70-28 Jun 72,

Final vept, 2930n 702830n 72. Carol H. Weiss, Laurie J. Bauman, and Theusa F. Rogers, Apr 71, 138p° HSRD-71-26, DHEW (HSM)-72-3006 Contract HSM-110-70-360

Descriptors: (\*Interviews, Research), Abstracts, Interpersonal' relations, Roles (Behavior), Behavior, Social perception, Sociopsychological

Identifiers: Respondent-interviewer interactions, Health services research and development.

The purpose of the report is to present an overview of studies in interviewer-respondent interaction. The study identifies unsettled issues in interviewer behavior in the survey interview. (Author)

PB-204 656

Wisconsin Univ., Madison, Dept. of Postgraduate

A STUDY ON THE FEASIBILITY OF ESTABL-SIMING A NATIONAL MEDICAL DIAL AC-CESS INFORMATION RETRIEVAL SYSTEM. Final rept., Thomas C. Meyer. Feb 70, 140p LHNCBC-71-04

Contract NLM-69-22

Descriptors: (\*Clinical medicine, \*Information retrieval), (\*Information systems, Clinical medicine). Medical records, Information centers, Planning. Data processing, Data storage. Identifiers: \*Medical information systems, Dial access systems.

study examines the costs and operating problems associated with a national center which in response to telephone calls would provide any one of a 1000 five-six minute recorded messages: in this case, these are envisaged to be on patient-care problems. The phone calls are assumed to arvia INWATS (Inward Wide Area Telephone Service) lines and the number and cost of such lines is computed. An automatic message selection is described. Guidelines for data base development and promotion of the service are also provided. (Author)

PB-204 924

Blue Cross Association, Chicago, Ill. Health Services Foundation.

AN INCENTIVE REIMBURSEMENT/INDUSTRI-AL ENGINEERING EXPERIMENT. Final rept. 28 Jun 68-28 Mar 70,

C. Patrick Hardwick, and Harvey Wolfe. 31 Mar 70, 547p° HSRD-71-23 Contract PH-110-68-188

Prepared in cooperation with Blue Cross of Western Pennsylvania. Pittsburgh. Research Dept.

Descriptors: (\*Industrial engineering, \*Hospitals), (°Cost control, Hospitals), (°Health insurance, \*Benefit cost analysis). Medical services, Evaluation, Operating costs, Economic analysis, Management analysis. Cost estimates, Economic surveys, Incentive plans.

Identifiers: Health services research and development. \*Blue Cross Association.

The analysis of a demonstration contract combines the placement of industrial engineers in three urban short-term general hospitals with an incentive based on implemented cost savings projects. The evaluation focuses on quantification of cost savings, obstacles to full implementation, the incentive calculations and their effect, and how involvement in the program affected Blue Cross and participating hospitals A major conclusion is that a hospital industrial engineering program, to be effective, must be introduced at and have the full support of the organization's highest management

levels. Two results are evident from the evalua tion: first, that an industrial engineering program do s have an impact on the costs of hospital departments: second, that for an incentive to be effective, it must have considerable dollar power. which can only be achieved through the involvement of all third party agr ries which reimburse hospitals on a cost basis.

PB-206 420

Massachusetts Inst. of Tech., Lexington, Lincoln

EVALUATION OF AIDE TRIAGE OF AMBULA-TORY PATIENTS. Project rept.,

L. Goodstine, K. Streiff, and F. E. Bragg. 6 Apr 71, 43p ACP-20 HSRD-ACP-71-7 Contract HSM-110-69-264

repared in cooperation with Harvard Medical School, Beth Israel Hospital. Boston. Mass.

Descriptors: (\*Medical services, Classifications), Medical records, Paramedical sciences, Medical personnel, Diagnosic, Identifiers: "Emergency medical care, Ambulato-

Anticipating an ambulatory facility in which paraprofessional personnel preside at some visits, presenting patients must be classified into categories according to their needs. This report describes a triage process which distinguishes between emergency and non-emergency patients and classi-fies the non-emergency patients into work-up categories. The process, administered by a nonprofessional, is guided by an alphabetical listing of over 260 chief complaints, each of which is associated with appropriate rules for classification.

PR-207 230

ry patients.

National Center for Health Services Research and Development, Rockville, Md. PROVISIONAL GUIDELINES FOR AUTO-MATED MULTIPHASIC HEALTH TESTING AND SERVICES. VOLUME 3. PROCEEDINGS OF THE INVITATIONAL CONFERENCE ON AMHTS. 21-23 JANUARY 1970.

1970, 389p° HSRD-71-33 DHEW (HSM)-7203011 Library of Congress Catalog Card No. 78-608607. See also Volume 2, PB-196000.

Descriptors: (\*Medical services, Automation), (\*Information systems, Medical services), (\*Medical examination, Automation). Information centers. Information retrieval, Computers, Data processing, Medical records, Evaluation, Systems engineering, Medicine. Diagnosis, Preventive medicine, Quality control, Proceedings, Cost anal-

ysis.
Identifiers: Health services research and development. Automatic multiphasic health testing and services.

The volume documents recommendations advanced in volumes 1 and 2. Section headings are: The Uses and Purposes of AMHTS in Health Care (health maintenance, patient surveillance, diagnostic adjuncts): Technology in AMHTS (automated instruments and their maintenance, clinical laboratory instrumentation, pattern recognition, data processing requirements, physical facilities, total systems design and analysis, government-industry interrelationships in AMHTS); Human Factor in AMHTS (the health care structure and AMHTS, consumer and provider acceptance, customizing screening programs through communications transactions); Cost and Cost Analysis in AMHTS (predicting capital and operating costs by plant, staff, tests, and patient selection and load).



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NAVAL TRAINING, INSTRUCTION MANUALS
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MAYAL TRAINING, HILITARY MEDICINE MID-PROJECT STATUS AND PLAN REPORT, VOLUME I. AC-723 167

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WAVAL VESSELS (CCHBATANT), PERSONNEL HANAGEHENT THE RFLATIVE IMPOPTANCE OF JOB FACTORS A NEW MEASUREMENT APPR-ACH. AC-708 456

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